STEVENS CREEK HYDROLOGY

CASE STUDIES

January 1976

1.5.354

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STEVENS CREEK HYDROLOGY

CASE STUDIES

(January 1976)

by

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and

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under the direction of

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January 13, 1976

Attached for your review and comments are a summary and detailed analysis of the one percent flood for Stevens Creek.

It is presented herein, as an example of applying your short range recommendations to our hydrology methodology. The longer range recommendations are being implemented, but will take some time to conclude.

In this analysis, and because of expediency, we utilized the presently used (1972) regression equations.

Stevens Creek passes under Highway 280 through a culvert that has a 3800 c.f.s. capacity. The citizens upstream of the highway are concerned about increased flooding due to the small capacity of the culvert. As a measure the Department of Transportation prepared plans for adding another culvert for a total capacity of 6800 c.f.s.

The attached calculations show that the resultant values do not deviate much from the adopted total capacity.

As a result the design flow of 6800 c.f.s. will be considered adequate.

We would appreciate it if you would consider the various alternatives of the study and comment on which you think is the more appropriate.

We would appreciate an indication of your opinions on this work by January 21, as that is the time that the State is going to advertise the culvert project.

Sincerely yours,

E. S. Watson
Division Engineer
Resources Management Division

Attachment

SUMMARY OF
STEVENS CREEK HYDROLOGY

Upper Stevens Creek drainage area was used to verify the application of some of the panels recommendations for the hydrology procedures. The area was divided into two subareas; a 17.3 square mile area above the reservoir and a 3.6 square mile area just downstream of the reservoir. There is a stream gauge (1930-1974) located just below the reservoir. The reservoir (3800 A.F.) was constructed in 1935. The drainage areas were planimetered from U.S.G.S. 7½ minute quad sheets. The Mean Annual Precipitation was based on the map drawn in 1972.

A pattern hydrograph was developed using a twenty-four hour storm with a volume equal to $(\text{M.A.P.})^{.65}$ inches and the Corps of Engineers' Standard Storm Distribution with a constant 30% loss rate.

For balancing the peak and twenty-four hour volume of the pattern hydrographs, the 1972 revised regression equations were used:

Peak

Mean, $M = \log\left(1.92575\, A^{0.78}\, (\text{M.A P.})^{1.104}\right)$

Standard Deviation, $= .44438\, A^{0.03}\, \text{M.A.P.}^{-0.018}$

Daily Volume

Mean, $M = \log\left(.1808\, A^{0.923}\, (\text{M.A P.})^{1.561}\right)$

Standard Deviation $= .9718\, A^{-0.007}\, (\text{M.A.P.})^{-0.197}$

As per recommendations of the panel, the daily volume was adjusted to reflect the 24-hour volume by the equation:

$$\text{Log } Q_{\text{24-hour}} = .23 \log Q_{\text{peak}} = .77 \log Q_{\text{daily}}$$

To properly evaluate the effects on the peaks, of regulation and different hydrograph volumes on the peaks, several different combinations were studied. Some of the results are summarized as follows:

	Peak	Daily Vol.	Peak	24-Hr. Vol.
Reservoir Inflow	7563 cfs	5520 AF	7563 cfs	6947 AF
Reservoir Outflow				
Initial Storage 3804 AF	6140	5450	6880	6880
Initial Storage 2000 AF	6120	3870	6880	5340
Initial Storage 0 AF	3430	1940	5910	3410

The initial storage level of 2000 AF is the level determined from a coincident frequency study following procedures outlined in Statistical Methods in Hydrology. The coincident frequency study was done previously and not as part of the present study. The results appear to be correct and in the interest of expediency are not included here.

The records of the stream gauge below the reservoir were statistically analyzed by utilizing the Pearson Type III frequency distribution. Only those records from 1936-1974, when the reservoir was in operation, were used. The analysis produced:

$N = 37 \quad M = 2.1923 \quad S = .6532 \quad G = -.04 \quad Q\ 1\% = 4870$

For normal distribution $G = 0 \quad Q\ 1\% = 5180$

The weighted average of the regional and the statistical values, based on equivalent years of record, was determined. The equivalent years of record for the regional regression equations were computed from:

$e = \sqrt{\frac{S^2}{N}}$ Where e = standard error of mean

S = standard deviation

N = equivalent number of years

$$N = \frac{S^2}{e^2} = \frac{(.454)^2}{(.128)^2} = 12 \text{ years}$$

Weighted Average Peak Outflow with Unadjusted Volume (Daily)

$$\frac{5180 \text{ cfs} \times 37 \text{ years} + 6130 \text{ cfs} \times 12 \text{ years}}{37 + 12} = 5410 \text{ cfs}$$

Weighted Average Peak Outflow with Adjusted Volume (24-Hr.)

$$\frac{5180 \text{ cfs} \times 37 \text{ years} + 6880 \times 12 \text{ years}}{37 + 12} = 5600$$

These values correspond to the weighted average outflow from the reservoir with an initial reservoir level of 2000 AF.

For more detailed discussion of the above summary refer to the attached binder of computation sheets and computer printouts. In this binder the results of the previously discussed eight conditions are shown. These conditions are restated below for easy reference. The given 1% design flow (cfs) is the routed value to route 280.

Peak flow resulting from:

1. Unadjusted volume of inflow hydrographs i.e., daily volumes, no averaging with regulated flow record.

	Peak at Route 280 cfs
a. Reservoir initial storage 3804 acre-feet, full..................	6620
b. Reservoir initial storage 2000 acre-feet, incidental...........	6580
c. Reservoir initial storage, empty.....	3760

2. Adjusted daily volumes of inflow hydrograph to reflect the maximum 24-hour volume, no averaging with regulated flow record.

	Peak at Route 280 cfs
a. Reservoir full	7580
b. Reservoir 2000 acre-feet	7570
c. Reservoir empty	6800
3. Initial reservoir level at 2000 acre-feet capacity (coincidental).	
a. Peak outflow of routed daily volume averaged with statistics of recorded data	5880
b. Peak outflow of routed 24-hour volume averaged with statistics of recorded data	6300

Results

Alternative 3 b. with a 1% design flow of 6300 cfs at the confluence with Highway 280, was determined by applying the recommendations of the panel. It does not deviate significantly from a previously determined design flood peak of 6800 cfs of the culvert.

It was contemplated that, for planning purposes, the results could range between 5880 cfs (Alternative 3 a.) and 7580 cfs (Alternative 2 a.).

EW
DKG [illegible]

DR. VUJICA YEVJEVICH
1912 Sequoia Street
Fort Collins, Colo. 80521

January 27, 1976

Mr. E.S. Watson
Division Engineer
Resources Management Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118

Subject: Stevens Creek Hydrology

Dear Gene:

Your letter of January 13, 1976, with the write-up of four pages "Summary of Stevens Creek Hydrology" and the report "Stevens Creek Hydrology--Case Studies" of January 1976 enclosed, arrived to Fort Collins, Colorado only last Friday, January 23, 1976. I immediately called you by telephone to assertain whether my reaction to and opinion on the questions posed in the letter are still needed. In your absence I talked with Mr. A. Saah. We agreed that I should study the material during the weekend (January 24-26), and not later than by today to send you my reaction and opinions.

Basically, in determining 1% flood peak discharge of the Stevens Creek under Highway 280 through a culvert the District has used the short-range recommendations supplied to the District by our Panel in the submitted draft report. As I can see, no substantial change will be made in the final report except as it concerns the use of records of stream flows affected by regulation reservoirs.

Your approach to determination of 1% flood peak discharge of the Stevens Creek, in using several approaches, is basically sound. As one could expect the frequency analysis of flood peaks in the period of 37 years of records of regulated flows produced the smallest 1% flood peak discharge in comparison with the results obtained by the other methods, namely around 5000 cfs (Q 1% = 4850 cfs for the use of Log Pearson Type III distribution and Q 1% = 5180 cfs for the use of Gaussian distribution), while the other recommended methods produced the peak discharge values in a wide range, from 1940 cfs through 7580 cfs. Most values calculated were above 5000 cfs (19 out of 24 values cited in the Summary, excluding the use of records of regulated stream flows). The flood hydrograph routing between the dam site of the reservoir and the Highway 280 might show a further attenuation of sharp flood peaks, as presented in the January 1976 Stevens Creek Hydrology Report. The lack of tests how homogeneous are the runoff time series of regulated flows during the 37 years of observations, and the uncertainty about the accuracy (systematic errors) in determining flood peak discharges at the gauging station of regulated stream flows require a caution in comparing the flood peak flows of regulated records of 4850 or 5180 cfs, and the peak flows obtained by other methods.

In my general assessment and judgment, the selected value of 6800 cfs as the 1% flood peak discharge at the culvert of the Stevens Creek at the Highway 280 is definitely on the higher side of the expected value of 1% flood peak discharge. A value between 6000-6500 cfs would be also on the safe side, namely on the highest side than the expected value, but somewhat more economical for the construction of the additional culvert.

Because the cost of the new culvert would be not significantly affected by a couple of hundred of cfs, my recommendation is to use the value of 6800 cfs as the culvert 1% flood peak design discharge.

Dr. Neil Grigg will give me soon the Panel draft report for a final review (especially for the problem of using in the methodology of recorded regulated stream flows), so that the Panel report in the final form could be submitted to the District very soon.

Sincerely yours,

V. Yevjevich

Vujica Yevjevich

VY:mr

c/5 EW
DKG
LCF

SCHOOL OF ENGINEERING
STANFORD UNIVERSITY
STANFORD, CALIFORNIA 94305

DEPARTMENT OF CIVIL ENGINEERING

February 2, 1976

Mr. E. S. Watson
Resources Management Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118

Dear Gene:

I have reviewed the situation as described in your letter of Jan. 13 (which got here Jan. 22) and prepared the following analysis.

Estimation of the 100-year flood peak at the gauge site immediately downstream from Stevens Creek Reservoir

1. From the 1972 regression equations,

   These equations will change somewhat if the regression is redone in accordance with the panel recommendations, probably in the direction of a smaller peak. The 7563 cfs is reasonable to use in the meantime.

2. From the gauged record,

   The station skew cannot be estimated reliably from a 37-year record (but 1936-74 is 39 years? Why were the records for 1960 and 1968 omitted from the analysis?) and the regional skew based on unmodified records would not apply just below a reservoir. The assumption of a normal distribution seems preferable to give 5180 cfs.

3. From routing through the reservoir,

   The 24-hour volume is recommended, but the inflow peak is so late on this hydrograph that the reservoir is filled by the early part of the hydrograph and a peak of 6880 cfs results whether the reservoir is assumed full at the beginning of the routing or whether the coincident storage is used. Some further thought should be given as to whether this is the best hydrograph shape, but 6880 cfs is reasonable for use in the meantime.

At this point, the panel has not come to complete agreement on what to do next and I am handicapped from having returned to Neil Grigg my copy full of comments for his use in drafting our report. My personal recommendation would be to review the above three numbers at this point. If they all agree within a tolerable range, take and use some kind of average. If not, go into a more sophisitcated, simulation-type analysis. A straight average would give 6540 cfs (except that the 7563 is probably going to be reduced when the regression is redone, the 5180 should change when the two missing years are included, and the 6680 may be high because of an unrealistically late-peaking inflow hydrograph). In any case my memory of the Panel discussions is that the weighting according to equivalent years of record only pertained to gauges where flows are substantially unmodified by upstream storage. The method does not pertain in this case where one is really just estimating a storage effect.

The next step is routing the above hydrograph downstream to Highway 280 and adding local inflow. The method seems generally reasonable subject to the following questions:

1. The timing of the precipitation over the local inflow area is such that the local inflow hydrograph peaks at almost exactly the same time as does the reservoir outflow hydrograph. Is this reasonable? Are the two times of concentration and the routing intervals reasonable?

2. Is there a gauge further downstream on Stevens Creek? If so, that record should be considered in local inflow analysis. For example, what flow would set by a linear interpolation proportion to tributary drainage area between the two downstream gauges?

In any event, the computer output you provide show that the routing and combining increases the peak from 5596 to 6293 or by 697 cfs. Added to my figure above (6540), this gives a total of 7237 cfs which is within your range but somewhat higher than your 3b value of 6300 cfs. However, the overall impact of my discussion above is to suggest that 7237 is probably high and thus I too concur with using 6800 until more refined studies on some of these points can be completed.

In summary, I endorse using 6800 cfs as adequate and concur with your methodology except for the technicalities outlined above and for the weighted averaging of the analysis of a modified record with the results of a regression analysis of unmodified record. I believe that the flow differences involved in this case (5180 to 7560 cfs) are large enough to be important; and if variation of the estimate within this range would make an important difference for structural design cost or acreages shown as inundated for flood plain management purposes, more sophisticated simulation studies should be seriously considered.

Sincerely yours,

L. Douglas James
Visiting Professor

cc: Grigg, Dawdy, Beard, Yevjevich

2/6 EW
DKG
LCF

LEO R. BEARD, *Civil Engineer*

512 327 [illegible]

[illegible] Laurel Valley [illegible]
Austin, Texas 78[illegible]

February 3, 1976

Mr. E.S. Watson
Resources Management Division
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118

Dear Gene:

I just returned to Austin after a week in Geneva and a week in Washington, and found your letter of January 13 on Stevens Creek, which must have come by surface mail, as it missed my departure on the 18th. Although it appears late to comment, I have reviewed the material and feel that the methods and conclusions are very good.

It wasn't possible for me to follow exactly what was done in the last section of computer runs, which formed the basis of your recommendation; but I can check the quantities closely, so they look good to me.

It appears that a design of 6,800 cfs at the highway crossing is reasonably conservative, and I would certainly go along with it, particularly in view of the flood history on the stream.

I am sorry that I did not get this sooner, and hope this might be of some help. Please let me know if I can respond more fully.

Best wishes.

Sincerely,

Roy

Leo R. Beard

LRB/tgp

```
STEVENS CREEK SUBAREAS A.



AREA =     17.300    MAP =    35.500
```

A

@ Reservoir

```
PEAK FLOW CALCULATIONS

MEAN =      2.962     STANDARD DEVIATION =     0.4539

 EXPECTED
PROBABILITY        K       KSIGMA      MKSIGMA        Q          CSM      CSMI

    1.           2.02      0.9169        3.88       7563.        437.      12.
    2.           1.83      0.8307        3.79       6200.        358.      10.
   10.           1.25      0.5674        3.53       3383.        195.       5.
   50.           0.10      0.0454        3.01       1017.         59.       2.
   90.          -1.41     -0.6400        2.32        210.         12.       0.


24HR VOLUME CALCULATIONS

MEAN =      2.820     STANDARD DEVIATION =     0.4715

 EXPECTED
PROBABILITY        K       KSIGMA      MKSIGMA       VOL       VOLCFS        V24

    1.           1.95      0.9219        3.74       5517.       2781.      66752.
    2.           1.73      0.8379        3.66       4547.       2293.      55021.
   10.           1.22      0.5734        3.39       2473.       1247.      29922.
   50.           0.08      0.0391        2.86        723.        364.       8745.
   90.          -1.32     -0.6238        2.20        157.         79.       1900.



                              24 HR.   STORM   (INCHES)
RETURN PERIOD   100 YR    50 YR    20 YR    10 YR     5 YR      2 YR     1.1 YR
EXCEED. PROB.     1 %      2 %      5 %      10 %     20 %      50 %      90 %

                 10.18     9.25     7.91     6.92     5.90      4.33      2.57
```

log Q = .23 log Q + .77 log Q

= .23 log 7563 + .77 log 2781 = 3.54

= 3500 ⇒ S-012

```
FLOOD FREQUENCY STUDY - PEARSON TYPE 3 DISTRIBUTION (LOGARITHMS)

     STEVENS CREEK  #44  JUST BELOW DAM                            PAGE    1
      ANNUAL MAXIMUMS  1936-74

YEAR                DISCHARGE           DISCHARGE             PLOTTING
                      (CFS)              (LOG 10)              POSITION

1956                   1420            3.1522883                 1.351
1963                   1400            3.1461280                 4.054
1969                   1370            3.1367206                 6.757
1958                   1220            3.0863598                 9.459
1965                   1090            3.0374265                12.162
1940                   1090            3.0374265                14.865
1967                    825            2.9164539                17.568
1952                    810            2.9084850                20.270
1973                    792            2.8987252                22.973
1941                    700            2.8450980                25.676
1938                    494            2.6937269                28.378
1974                    486            2.6866363                31.081
1951                    362            2.5587086                33.784
1942                    346            2.5390761                36.486
1936                    242            2.3838154                39.189
1953                    217            2.3364597                41.892
1957                    173            2.2380461                44.595
1943                    128            2.1072100                47.297
1937                    124            2.0934217                50.000
1970                    110            2.0413927                52.703
1939                    103            2.0128372                55.405
1961                    100            2.0000000                58.108
1955                     90            1.9542425                60.811
1945                     90            1.9542425                63.514
1959                     87            1.9395193                66.216
1962                     75            1.8750613                68.919
1949                     50            1.6989700                71.622
1948                     42            1.6232493                74.324
1946                     39            1.5910646                77.027
1971                     36            1.5563025                79.730
1944                     32            1.5051500                82.432
1972                     30            1.4771213                85.135
1950                     27            1.4313638                87.838
1954                     25            1.3979400                90.541
1947                     18            1.2552725                93.243
1966                     10            1.0000000                95.946
1964                     10            1.0000000                98.649
```

```
FLOOD FREQUENCY STUDY - PEARSON TYPE 3 DISTRIBUTION (LOGARITHMS)

    STEVENS CREEK  #44  JUST BELOW DAM                            PAGE   2
     ANNUAL MAXIMUMS  1936-74

NUMBER OF FLOOD PEAKS(OBSERVATIONS)=          37

ARITHMETIC MEAN =                            385.486

NUMBER OF OBSERVATIONS EQUAL TO ZERO =           0

NUMBER OF OBSERVATIONS USED (STATISTICS) =    37

MEAN OF LOGARITHMS =                       2.1923228

GEOMETRIC MEAN =                             155.712

STANDARD DEVIATION OF LOGARITHMS =     0.6531626

COEFFICIENT OF SKEWNESS(LOG10) =            -0.0501

 SKEW     RETURN  SELECTED      COMPUTED DISCHARGES
FACTORS   PERIOD  RECURRENCE
          (YEARS)  INTERVAL        (LOG 10)       (CFS)
                   (PERCENT)

  0.008        2      50.00      2.1977594         157
  0.844        5      20.00      2.7435062         553
  1.276       10      10.00      3.0257262        1061
  1.630       20       5.00      3.2572205        1808
  1.733       25       4.00      3.3243951        2110
  2.027       50       2.00      3.5160848        3281
  2.289      100       1.00      3.6876765        4871
  2.529      200       0.50      3.8440231        6982
  3.019     1000       0.10      4.1643314       14599
  3.613    10000       0.01      4.5521029       35653
```

1-a

```
******************************
HEC-1 VERSION DATED JAN 1973
UPDATED AUG 74
CHANGE NO. 01
******************************
                    STEVENS CREEK  HYDROLOGY   100 YEAR  FLOOD HYDROGRAPHS
```

RESERVOIR FULL 3804 AF
Unadjusted Hydrograph Volume

```
                                          JOB SPECIFICATION
                              NQ    NHR   NMIN  IDAY   IHR  IMIN METRC  IPLT  IPRT NSTAN
                              50      1      0     0     0     0     0     2     0     0
                                                 JOPER     NWT
                                                     3       0



            **********       **********       **********       **********       **********

                                       SUB-AREA RUNOFF COMPUTATION

                  RUNOFF HYDROGRAPH  INFLOW TO RESERVOIR   (AREA A)      POINT 1

                              ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                  1       0       0       0       0       0       1

                                              HYDROGRAPH DATA
                   IHYDG     IUHG    TAREA     SNAP    TRSDA    TRSPC    RATIO   ISNOW   ISAME   LOCAL
                       0        0    17.30     0.00     0.00     0.00    0.000       0       0       0

                                                PRECIP DATA
                                        NP   STORM     DAJ     DAK
                                        24   10.18    0.00    0.00
                                               PRECIP PATTERN
            1.66      2.32      2.16      3.49      4.32      3.66      3.32      3.82      3.82      3.49
            3.49      3.82      3.98      5.82      4.16      6.32      6.15     10.96      4.65      4.47
            3.82      3.49      3.49      3.32

                                                 LOSS DATA
                  STRKR   DLTKR   RTIOL   ERAIN   STRKS   RTIOK   STRTL   CNSTL   ALSMX   RTIMP
                  0.000   0.000   1.000   0.000   0.000   1.000   0.000   0.130   0.000   0.000

                                           UNIT HYDROGRAPH DATA
                                     TC=  2.30     R=  2.40     NTA=  6

                                         UNIT GRAPH TIME-AREA ORDINATES
            0.15      3.18      6.70     10.55     15.00     17.30

                                              RECESSION DATA
                                STRTQ=     0.00     QRCSN=     0.00     RTIOR= 1.00

                  UNIT HYDROGRAPH 14 END-OF-PERIOD ORDINATES, LAG=   2.06 HOURS, CP= 0.52  VOL= 1.00
            820.     2294.     2607.     1875.     1228.      805.      527.      345.      226.      148.
             97.       64.       42.       27.

                                            END-OF-PERIOD FLOW
                                       TIME   RAIN   EXCS     COMP Q
                                          1 0.1690 0.0390        32.
                                          2 0.2362 0.1062       176.
                                          3 0.2199 0.0899       419.
```

```
                    4 0.3553 0.2253       741.
                    5 0.4398 0.3098      1252.
                    6 0.3726 0.2426      1827.
                    7 0.3380 0.2080      2173.
                    8 0.3889 0.2589      2321.
                    9 0.3889 0.2589      2458.
                   10 0.3553 0.2253      2570.
                   11 0.3553 0.2253      2594.
                   12 0.3889 0.2589      2599.
                   13 0.4052 0.2752      2670.
                   14 0.5925 0.4625      2935.
                   15 0.4235 0.2935      3322.
                   16 0.6434 0.5134      3668.
                   17 0.6261 0.4961      4111.
                   18 1.1157 0.9857      4985.
                   19 0.4734 0.3434      5907.
                   20 0.4550 0.3250      5907.
                   21 0.3889 0.2589      5193.
                   22 0.3553 0.2253      4454.
                   23 0.3553 0.2253      3834.
                   24 0.3380 0.2080      3366.
                   25 0.0000 0.0000      2853.
                   26 0.0000 0.0000      2132.
                   27 0.0000 0.0000      1427.
                   28 0.0000 0.0000       926.
                   29 0.0000 0.0000       602.
                   30 0.0000 0.0000       385.
                   31 0.0000 0.0000       243.
                   32 0.0000 0.0000       142.
                   33 0.0000 0.0000        87.
                   34 0.0000 0.0000        51.
                   35 0.0000 0.0000        29.
                   36 0.0000 0.0000        15.
                   37 0.0000 0.0000         6.
                   38 0.0000 0.0000         0.
                   39 0.0000 0.0000         0.
                   40 0.0000 0.0000         0.
                   41 0.0000 0.0000         0.
                   42 0.0000 0.0000         0.
                   43 0.0000 0.0000         0.
                   44 0.0000 0.0000         0.
                   45 0.0000 0.0000         0.
                   46 0.0000 0.0000         0.
                   47 0.0000 0.0000         0.
                   48 0.0000 0.0000         0.
                   49 0.0000 0.0000         0.
                   50 0.0000 0.0000         0.

                  SUM  10.22   7.10     78412.

            PEAK    6-HOUR   24-HOUR   72-HOUR    TOTAL VOLUME
   CFS     5907.     5093.     3145.     1568.          78412.
INCHES                2.74      6.76      7.03            7.03
 AC-FT               2527.     6242.     6484.           6484.
```

```
*DVF*
                                                  STATION     1

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
                                                                                                        PRECIP(L) AND EXCESS(X)
       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
        1 I         .         .         .         .         .         .         .         .         .         .         .     LLLXX
        2 . I       .         .         .         .         .         .         .         .         .         .         .   LLLXXXX
        3 .   I     .         .         .         .         .         .         .         .         .         .         .    LLLXXX
        4 .      I  .         .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
        5 .         .  I      .         .         .         .         .         .         .         .         .        LLLXXXXXXXXX
        6 .         .       I .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
        7 .         .         . I       .         .         .         .         .         .         .         .         . LLLXXXXXX
        8 .         .         .  I      .         .         .         .         .         .         .         .         LLLLXXXXXXX
        9 .         .         .    I    .         .         .         .         .         .         .         .         LLLLXXXXXXX
       10 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
       11 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
       12 .         .         .     I   .         .         .         .         .         .         .         .         LLLLXXXXXXX
       13 .         .         .      I  .         .         .         .         .         .         .         .         LLLXXXXXXXX
       14 .         .         .        I.         .         .         .         .         .         .         .    LLLXXXXXXXXXXXXX
       15 .         .         .         .  I      .         .         .         .         .         .         .        LLLLXXXXXXXX
       16 .         .         .         .      I  .         .         .         .         .         .         .   LLLXXXXXXXXXXXXXX
       17 .         .         .         .         .I        .         .         .         .         .         .   LLLLXXXXXXXXXXXXX
       18 .         .         .         .         .         I         .         .         .         . LLLXXXXXXXXXXXXXXXXXXXXXXXXXX
       19 .         .         .         .         .         .        I.         .         .         .         .       LLLXXXXXXXXXX
       20 .         .         .         .         .         .        I.         .         .         .         .        LLLXXXXXXXXX
       21 .         .         .         .         .         . I       .         .         .         .         .         LLLLXXXXXXX
       22 .         .         .         .         .    I    .         .         .         .         .         .         .LLLXXXXXXX
       23 .         .         .         .       I .         .         .         .         .         .         .         .LLLXXXXXXX
       24 .         .         .         .   I     .         .         .         .         .         .         .         . LLLXXXXXX
       25 .         .         .        I.         .         .         .         .         .         .         .         .         L
       26 .         .         .I        .         .         .         .         .         .         .         .         .         L
       27 .         .   I     .         .         .         .         .         .         .         .         .         .         L
       28 .        I.         .         .         .         .         .         .         .         .         .         .         L
       29 .     I   .         .         .         .         .         .         .         .         .         .         .         L
       30 .   I     .         .         .         .         .         .         .         .         .         .         .         L
       31 . I       .         .         .         .         .         .         .         .         .         .         .         L
       32 .I        .         .         .         .         .         .         .         .         .         .         .         L
       33 .I        .         .         .         .         .         .         .         .         .         .         .         L
       34 .I        .         .         .         .         .         .         .         .         .         .         .         L
       35 I         .         .         .         .         .         .         .         .         .         .         .         L
       36 I         .         .         .         .         .         .         .         .         .         .         .         L
       37 I         .         .         .         .         .         .         .         .         .         .         .         L
       38 I         .         .         .         .         .         .         .         .         .         .         .         L
       39 I         .         .         .         .         .         .         .         .         .         .         .         L
       40 I         .         .         .         .         .         .         .         .         .         .         .         L
       41 I         .         .         .         .         .         .         .         .         .         .         .         L
       42 I         .         .         .         .         .         .         .         .         .         .         .         L
       43 I         .         .         .         .         .         .         .         .         .         .         .         L
       44 I         .         .         .         .         .         .         .         .         .         .         .         L
       45 I         .         .         .         .         .         .         .         .         .         .         .         L
       46 I         .         .         .         .         .         .         .         .         .         .         .         L
       47 I         .         .         .         .         .         .         .         .         .         .         .         L
       48 I         .         .         .         .         .         .         .         .         .         .         .         L
       49 I         .         .         .         .         .         .         .         .         .         .         .         L
       50 I         .         .         .         .         .         .         .         .         .         .         .         L
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*OVN*


              **********          **********          **********          **********          **********

                                                  HYDROGRAPH BALANCE

                   BALANCED HYDROGRAPH INFLOW TO  RESERVOIR    AREA A

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                      1      88       0       0       0       0       1

            BALANCE DESIRED      1     7563.     24     66752.      0        0.       0       0.       0       0.
         BALANCE RESULTS            7563.           66752.               0.               0.               0.

NUMBER OF ITERATIONS=  4

                                             END-OF-PERIOD FLOWS AT     1
                                                    SUM=    69331.
                 19.      156.      370.      655.     1065.     1554.     1849.     1975.     2091.     2187.
               2206.     2211.     2271.     2497.     2826.     3120.     3497.     4241.     7563.     5025.
               4418.     3789.     3261.     2863.     2427.     1814.     1214.      788.      532.      340.
                215.      125.       77.       45.       25.       13.        5.        0.        0.        0.
                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.

                                         PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                CFS     7563.     4755.     2781.     1387.         69331.
                             INCHES                2.56      5.98      6.21           6.21
                              AC-FT               2359.     5520.     5733.          5733.
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*OVF*
                                                  STATION     1

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
        1 I         .         .         .         .         .         .         .         .         .         .         .         .
        2 . I       .         .         .         .         .         .         .         .         .         .         .         .
        3 .   I     .         .         .         .         .         .         .         .         .         .         .         .
        4 .      I  .         .         .         .         .         .         .         .         .         .         .         .
        5 .         .I        .         .         .         .         .         .         .         .         .         .         .
        6 .         .     I   .         .         .         .         .         .         .         .         .         .         .
        7 .         .       I .         .         .         .         .         .         .         .         .         .         .
        8 .         .         I         .         .         .         .         .         .         .         .         .         .
        9 .         .         .I        .         .         .         .         .         .         .         .         .         .
       10 .         .         . I       .         .         .         .         .         .         .         .         .         .
       11 .         .         . I       .         .         .         .         .         .         .         .         .         .
       12 .         .         . I       .         .         .         .         .         .         .         .         .         .
       13 .         .         .  I      .         .         .         .         .         .         .         .         .         .
       14 .         .         .    I    .         .         .         .         .         .         .         .         .         .
       15 .         .         .       I .         .         .         .         .         .         .         .         .         .
       16 .         .         .         .I        .         .         .         .         .         .         .         .         .
       17 .         .         .         .    I    .         .         .         .         .         .         .         .         .
       18 .         .         .         .         . I       .         .         .         .         .         .         .         .
       19 .         .         .         .         .         .         .         .     I   .         .         .         .         .
       20 .         .         .         .         .         I         .         .         .         .         .         .         .
       21 .         .         .         .         .   I     .         .         .         .         .         .         .         .
       22 .         .         .         .       I .         .         .         .         .         .         .         .         .
       23 .         .         .         .  I      .         .         .         .         .         .         .         .         .
       24 .         .         .        I.         .         .         .         .         .         .         .         .         .
       25 .         .         .   I     .         .         .         .         .         .         .         .         .         .
       26 .         .       I .         .         .         .         .         .         .         .         .         .         .
       27 .         . I       .         .         .         .         .         .         .         .         .         .         .
       28 .       I .         .         .         .         .         .         .         .         .         .         .         .
       29 .    I    .         .         .         .         .         .         .         .         .         .         .         .
       30 .  I      .         .         .         .         .         .         .         .         .         .         .         .
       31 . I       .         .         .         .         .         .         .         .         .         .         .         .
       32 .I        .         .         .         .         .         .         .         .         .         .         .         .
       33 .I        .         .         .         .         .         .         .         .         .         .         .         .
       34 I         .         .         .         .         .         .         .         .         .         .         .         .
       35 I         .         .         .         .         .         .         .         .         .         .         .         .
       36 I         .         .         .         .         .         .         .         .         .         .         .         .
       37 I         .         .         .         .         .         .         .         .         .         .         .         .
       38 I         .         .         .         .         .         .         .         .         .         .         .         .
       39 I         .         .         .         .         .         .         .         .         .         .         .         .
       40 I         .         .         .         .         .         .         .         .         .         .         .         .
       41 I         .         .         .         .         .         .         .         .         .         .         .         .
       42 I         .         .         .         .         .         .         .         .         .         .         .         .
       43 I         .         .         .         .         .         .         .         .         .         .         .         .
       44 I         .         .         .         .         .         .         .         .         .         .         .         .
       45 I         .         .         .         .         .         .         .         .         .         .         .         .
       46 I         .         .         .         .         .         .         .         .         .         .         .         .
       47 I         .         .         .         .         .         .         .         .         .         .         .         .
       48 I         .         .         .         .         .         .         .         .         .         .         .         .
       49 I         .         .         .         .         .         .         .         .         .         .         .         .
       50 I         .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

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                                          HYDROGRAPH ROUTING

                ROUTE FLOW  THRU RESERVOIR   POINT 1

                                ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                    1        1        0        0        0        0        1
                                                   ROUTING DATA
                                         QLOSS    CLOSS      AVG     IRES    ISAME
                                           0.0    0.000     0.00        1        0

                                NSTPS    NSTDL      LAG    AMSKK        X      TSK    STORA
                                    0        0        0    0.000    0.000    0.000    3804.

        STORAGE=         0.      3804.      3899.      3995.      4092.      4191.      4292.      4394.      4498.      4604.
        OUTFLOW=         0.       100.       557.      1408.      2529.      3880.      5438.      7192.      9127.     11243.

                                         TIME   EOP STOR     AVG IN    EOP OUT
                                            1      3797.        19.       100.
                                            2      3796.        87.       100.
                                            3      3809.       263.       123.
                                            4      3836.       513.       252.
                                            5      3878.       860.       454.
                                            6      3932.      1310.       849.
                                            7      3984.      1702.      1306.
                                            8      4018.      1912.      1677.
                                            9      4038.      2033.      1907.
                                           10      4051.      2139.      2057.
                                           11      4059.      2196.      2147.
                                           12      4062.      2209.      2187.
                                           13      4065.      2241.      2222.
                                           14      4074.      2384.      2327.
                                           15      4093.      2662.      2545.
                                           16      4116.      2973.      2854.
                                           17      4140.      3309.      3182.
                                           18      4176.      3869.      3677.
                                           19      4289.      5902.      5393.
                                           20      4333.      6294.      6139.
                                           21      4263.      4721.      4991.
                                           22      4218.      4103.      4300.
                                           23      4179.      3525.      3710.
                                           24      4144.      3062.      3243.
                                           25      4113.      2645.      2812.
                                           26      4075.      2120.      2336.
                                           27      4029.      1514.      1804.
                                           28      3983.      1001.      1306.
                                           29      3944.       660.       960.
                                           30      3913.       436.       679.
                                           31      3887.       278.       499.
                                           32      3864.       170.       390.
                                           33      3844.       101.       294.
                                           34      3828.        61.       217.
                                           35      3816.        35.       157.
                                           36      3806.        19.       111.
                                           37      3798.         9.       100.
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                         39      3782.         0.         99.
                         40      3774.         0.         99.
                         41      3766.         0.         99.
                         42      3758.         0.         99.
                         43      3749.         0.         99.
                         44      3741.         0.         98.
                         45      3733.         0.         98.
                         46      3725.         0.         98.
                         47      3717.         0.         98.
                         48      3709.         0.         97.
                         49      3701.         0.         97.
                         50      3693.         0.         97.

                        SUM                            70684.

                     PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
          CFS       6139.     4702.      2747.      1414.          70684.
       INCHES                  2.53       5.91       6.33            6.33
        AC-FT                 2333.      5452.      5845.           5845.
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*OVF*
                                             STATION      1

                                   INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
  1 IO        .         .         .         .         .         .         .         .         .         .         .         .
  2 .I        .         .         .         .         .         .         .         .         .         .         .         .
  3 .O I      .         .         .         .         .         .         .         .         .         .         .         .
  4 .  O I    .         .         .         .         .         .         .         .         .         .         .         .
  5 .    O   I.         .         .         .         .         .         .         .         .         .         .         .
  6 .       O .  I      .         .         .         .         .         .         .         .         .         .         .
  7 .         .  O   I  .         .         .         .         .         .         .         .         .         .         .
  8 .         .      O I.         .         .         .         .         .         .         .         .         .         .
  9 .         .        OI         .         .         .         .         .         .         .         .         .         .
 10 .         .         .I        .         .         .         .         .         .         .         .         .         .
 11 .         .         .OI       .         .         .         .         .         .         .         .         .         .
 12 .         .         . I       .         .         .         .         .         .         .         .         .         .
 13 .         .         . I       .         .         .         .         .         .         .         .         .         .
 14 .         .         .  OI     .         .         .         .         .         .         .         .         .         .
 15 .         .         .    O I  .         .         .         .         .         .         .         .         .         .
 16 .         .         .        OI         .         .         .         .         .         .         .         .         .
 17 .         .         .         . OI      .         .         .         .         .         .         .         .         .
 18 .         .         .         .      O I.         .         .         .         .         .         .         .         .
 19 .         .         .         .         .         .   O    I.         .         .         .         .         .         .
 20 .         .         .         .         .         .         .O I      .         .         .         .         .         .
 21 .         .         .         .         .      I  O         .         .         .         .         .         .         .
 22 .         .         .         .         .I O      .         .         .         .         .         .         .         .
 23 .         .         .         .    I O  .         .         .         .         .         .         .         .         .
 24 .         .         .         .IO       .         .         .         .         .         .         .         .         .
 25 .         .         .     I O .         .         .         .         .         .         .         .         .         .
 26 .         .         .I O      .         .         .         .         .         .         .         .         .         .
 27 .         .    I  O .         .         .         .         .         .         .         .         .         .         .
 28 .         I  O      .         .         .         .         .         .         .         .         .         .         .
 29 .      I  O         .         .         .         .         .         .         .         .         .         .         .
 30 .   I  O  .         .         .         .         .         .         .         .         .         .         .         .
 31 .  I O    .         .         .         .         .         .         .         .         .         .         .         .
 32 . I O     .         .         .         .         .         .         .         .         .         .         .         .
 33 .I O      .         .         .         .         .         .         .         .         .         .         .         .
 34 .IO       .         .         .         .         .         .         .         .         .         .         .         .
 35 I O       .         .         .         .         .         .         .         .         .         .         .         .
 36 IO        .         .         .         .         .         .         .         .         .         .         .         .
 37 IO        .         .         .         .         .         .         .         .         .         .         .         .
 38 IO        .         .         .         .         .         .         .         .         .         .         .         .
 39 IO        .         .         .         .         .         .         .         .         .         .         .         .
 40 IO        .         .         .         .         .         .         .         .         .         .         .         .
 41 IO        .         .         .         .         .         .         .         .         .         .         .         .
 42 IO        .         .         .         .         .         .         .         .         .         .         .         .
 43 IO        .         .         .         .         .         .         .         .         .         .         .         .
 44 IO        .         .         .         .         .         .         .         .         .         .         .         .
 45 IO        .         .         .         .         .         .         .         .         .         .         .         .
 46 IO        .         .         .         .         .         .         .         .         .         .         .         .
 47 IO        .         .         .         .         .         .         .         .         .         .         .         .
 48 IO        .         .         .         .         .         .         .         .         .         .         .         .
 49 IO        .         .         .         .         .         .         .         .         .         .         .         .
 50 IO        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*



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                                                  HYDROGRAPH ROUTING

                   ROUTE  STEVENS CREEK RESERVOIR OUTFLOW  DOWN TO  RTE 280    POINT 2

                                    ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                        2        1        0        0        0        0        1
                                                      ROUTING DATA
                                             QLOSS    CLOSS      AVG     IRES    ISAME
                                               0.0    0.000     0.00        1        0

                                    NSTPS    NSTDL      LAG    AMSKK        X      TSK    STORA
                                        0        0        0    0.000    0.000    0.000       0.

     STORAGE=          0.        50.       100.       150.       250.       380.          0.          0.          0.          0.
     OUTFLOW=          0.       500.      1500.      2500.      6500.     13000.          0.          0.          0.          0.

                                             TIME  EOP STOR    AVG IN   EOP OUT
                                                1        6.      100.       58.
                                                2        8.      100.       83.
                                                3       10.      111.       99.
                                                4       15.      188.      151.
                                                5       27.      353.      269.
                                                6       49.      651.      493.
                                                7       76.     1078.     1018.
                                                8       97.     1491.     1447.
                                                9      113.     1792.     1759.
                                               10      123.     1982.     1961.
                                               11      129.     2102.     2089.
                                               12      133.     2167.     2160.
                                               13      135.     2204.     2200.
                                               14      138.     2274.     2267.
                                               15      146.     2436.     2420.
                                               16      156.     2699.     2738.
                                               17      165.     3018.     3087.
                                               18      175.     3430.     3514.
                                               19      207.     4535.     4787.
                                               20      238.     5766.     6007.
                                               21      224.     5565.     5456.
                                               22      199.     4646.     4446.
                                               23      185.     4005.     3896.
                                               24      172.     3477.     3373.
                                               25      161.     3027.     2942.
                                               26      149.     2574.     2488.
                                               27      130.     2070.     2110.
                                               28      105.     1555.     1608.
                                               29       84.     1133.     1178.
                                               30       68.      819.      853.
                                               31       56.      589.      614.
                                               32       47.      445.      475.
                                               33       40.      342.      397.
                                               34       31.      256.      314.
                                               35       24.      187.      240.
                                               36       18.      134.      178.
                                               37       14.      105.      136.
                                               38       11.      100.      115.
                   39        11.       100.       106.
                   40        10.        99.       102.
                   41        10.        99.       100.
                   42        10.        99.        99.
                   43        10.        99.        99.
                   44        10.        98.        99.
                   45        10.        98.        98.
                   46        10.        98.        98.
                   47        10.        98.        98.
                   48        10.        98.        98.
                   49        10.        97.        98.
                   50        10.        97.        97.

                  SUM                            70617.

              PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
       CFS    6007.    4684.     2742.      1412.          70617.
    INCHES              2.52      5.90       6.33            6.33
     AC-FT             2324.     5441.      5839.            5839.
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*OVF*
                                            STATION     2

                        INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
   0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
   1 .I        .         .         .         .         .         .         .         .         .         .         .         .
   2 .I        .         .         .         .         .         .         .         .         .         .         .         .
   3 .I        .         .         .         .         .         .         .         .         .         .         .         .
   4 . I       .         .         .         .         .         .         .         .         .         .         .         .
   5 .  OI     .         .         .         .         .         .         .         .         .         .         .         .
   6 .    O I  .         .         .         .         .         .         .         .         .         .         .         .
   7 .         OI        .         .         .         .         .         .         .         .         .         .         .
   8 .         .   OI    .         .         .         .         .         .         .         .         .         .         .
   9 .         .       I .         .         .         .         .         .         .         .         .         .         .
  10 .         .         I         .         .         .         .         .         .         .         .         .         .
  11 .         .         .I        .         .         .         .         .         .         .         .         .         .
  12 .         .         . I       .         .         .         .         .         .         .         .         .         .
  13 .         .         . I       .         .         .         .         .         .         .         .         .         .
  14 .         .         .  I      .         .         .         .         .         .         .         .         .         .
  15 .         .         .   I     .         .         .         .         .         .         .         .         .         .
  16 .         .         .      I  .         .         .         .         .         .         .         .         .         .
  17 .         .         .         IO        .         .         .         .         .         .         .         .         .
  18 .         .         .         .   IO    .         .         .         .         .         .         .         .         .
  19 .         .         .         .         .    I  O .         .         .         .         .         .         .         .
  20 .         .         .         .         .         .       I O         .         .         .         .         .         .
  21 .         .         .         .         .         .    OI   .         .         .         .         .         .         .
  22 .         .         .         .         .   O I   .         .         .         .         .         .         .         .
  23 .         .         .         .        OI         .         .         .         .         .         .         .         .
  24 .         .         .         .   OI    .         .         .         .         .         .         .         .         .
  25 .         .         .        OI         .         .         .         .         .         .         .         .         .
  26 .         .         .    OI   .         .         .         .         .         .         .         .         .         .
  27 .         .         .I        .         .         .         .         .         .         .         .         .         .
  28 .         .     I   .         .         .         .         .         .         .         .         .         .         .
  29 .         .IO       .         .         .         .         .         .         .         .         .         .         .
  30 .       IO.         .         .         .         .         .         .         .         .         .         .         .
  31 .     I   .         .         .         .         .         .         .         .         .         .         .         .
  32 .   IO    .         .         .         .         .         .         .         .         .         .         .         .
  33 .  IO     .         .         .         .         .         .         .         .         .         .         .         .
  34 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  35 . I       .         .         .         .         .         .         .         .         .         .         .         .
  36 .IO       .         .         .         .         .         .         .         .         .         .         .         .
  37 .I        .         .         .         .         .         .         .         .         .         .         .         .
  38 .I        .         .         .         .         .         .         .         .         .         .         .         .
  39 .I        .         .         .         .         .         .         .         .         .         .         .         .
  40 .I        .         .         .         .         .         .         .         .         .         .         .         .
  41 .I        .         .         .         .         .         .         .         .         .         .         .         .
  42 .I        .         .         .         .         .         .         .         .         .         .         .         .
  43 .I        .         .         .         .         .         .         .         .         .         .         .         .
  44 .I        .         .         .         .         .         .         .         .         .         .         .         .
  45 .I        .         .         .         .         .         .         .         .         .         .         .         .
  46 .I        .         .         .         .         .         .         .         .         .         .         .         .
  47 .I        .         .         .         .         .         .         .         .         .         .         .         .
  48 .I        .         .         .         .         .         .         .         .         .         .         .         .
  49 .I        .         .         .         .         .         .         .         .         .         .         .         .
  50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

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                                       SUB-AREA RUNOFF COMPUTATION

             RUNOFF HYDROGRAPH LOCAL INFLOW  AT RTE 280  (AREA B)   POINT 2

                               ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                   2       0       0       0       0       0       1

                                            HYDROGRAPH DATA
              IHYDG    IUHG   TAREA    SNAP   TRSDA   TRSPC   RATIO   ISNOW   ISAME   LOCAL
                  0       0    3.60    0.00    0.00    0.00   0.000       0       0       0

                                              PRECIP DATA
                                       NP  STORM     DAJ     DAK
                                       24   7.01    0.00    0.00
                                             PRECIP PATTERN
          1.61      2.42      2.10      3.39      4.19      3.71      3.23      3.71      3.87      3.39
          3.39      3.71      3.87      5.64      4.19      6.61      6.29     11.77      4.67      4.36
          3.71      3.39      3.55      3.23

                                               LOSS DATA
             STRKR   DLTKR   RTIOL   ERAIN   STRKS   RTIOK   STRTL   CNSTL   ALSMX   RTIMP
             0.000   0.000   1.000   0.000   0.000   1.000   0.000   0.090   0.000   0.150

                                          UNIT HYDROGRAPH DATA
                                     TC=  1.50     R=  1.20     NTA=  0

                                             RECESSION DATA
                                STRTQ=    0.00     QRCSN=    0.00    RTIOR= 1.00

             UNIT HYDROGRAPH  7 END-OF-PERIOD ORDINATES, LAG=   1.38 HOURS, CP= 0.60  VOL= 1.00
          497.      888.      551.      227.       93.       38.       16.

                                           END-OF-PERIOD FLOW
                                       TIME   RAIN   EXCS     COMP Q
                                          1 0.1129 0.0364       18.
                                          2 0.1696 0.0931       79.
                                          3 0.1472 0.0707      138.
                                          4 0.2376 0.1611      202.
                                          5 0.2937 0.2172      315.
                                          6 0.2601 0.1836      399.
                                          7 0.2264 0.1499      405.
                                          8 0.2601 0.1836      394.
                                          9 0.2713 0.1948      412.
                                         10 0.2376 0.1611      416.
                                         11 0.2376 0.1611      397.
                                         12 0.2601 0.1836      393.
                                         13 0.2713 0.1948      413.
                                         14 0.3954 0.3189      495.
                                         15 0.2937 0.2172      564.
                                         16 0.4634 0.3869      631.
                                         17 0.4409 0.3644      745.
                                         18 0.8251 0.7486      998.
                                         19 0.3274 0.2509     1114.
                                         20 0.3056 0.2291      882.
```

```
                         22 0.2376 0.1611       516.
                         23 0.2489 0.1724       440.
                         24 0.2264 0.1499       401.
                         25 0.0000 0.0000       295.
                         26 0.0000 0.0000       148.
                         27 0.0000 0.0000        59.
                         28 0.0000 0.0000        23.
                         29 0.0000 0.0000         9.
                         30 0.0000 0.0000         2.
                         31 0.0000 0.0000         0.
                         32 0.0000 0.0000         0.
                         33 0.0000 0.0000         0.
                         34 0.0000 0.0000         0.
                         35 0.0000 0.0000         0.
                         36 0.0000 0.0000         0.
                         37 0.0000 0.0000         0.
                         38 0.0000 0.0000         0.
                         39 0.0000 0.0000         0.
                         40 0.0000 0.0000         0.
                         41 0.0000 0.0000         0.
                         42 0.0000 0.0000         0.
                         43 0.0000 0.0000         0.
                         44 0.0000 0.0000         0.
                         45 0.0000 0.0000         0.
                         46 0.0000 0.0000         0.
                         47 0.0000 0.0000         0.
                         48 0.0000 0.0000         0.
                         49 0.0000 0.0000         0.
                         50 0.0000 0.0000         0.

                        SUM   7.03   5.15     11958.

                  PEAK     6-HOUR   24-HOUR   72-HOUR    TOTAL VOLUME
       CFS       1114.       837.      490.      239.          11957.
    INCHES                   2.16      5.07      5.15            5.15
     AC-FT                   415.      973.      989.            989.
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*OVF*
                                                 STATION     2

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
       0.      200.      400.      600.      800.     1000.     1200.        0.        0.        0.        0.        0.        0.
                                                                                                       PRECIP(L) AND EXCESS(X)
      0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
       1 .I        .         .         .         .         .         .         .         .         .         .         .      LLXX
       2 .   I     .         .         .         .         .         .         .         .         .         .         .     LLXXX
       3 .      I  .         .         .         .         .         .         .         .         .         .         .     LLXXX
       4 .         I         .         .         .         .         .         .         .         .         .         .   LLXXXXX
       5 .         .     I   .         .         .         .         .         .         .         .         .         .  LLXXXXXX
       6 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
       7 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
       8 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
       9 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
      10 .         .         .I        .         .         .         .         .         .         .         .         .   LLXXXXX
      11 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
      12 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
      13 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
      14 .         .         .    I    .         .         .         .         .         .         .         .         LLXXXXXXXXX
      15 .         .         .       I .         .         .         .         .         .         .         .         .  LLXXXXXX
      16 .         .         .         . I       .         .         .         .         .         .         .       LLXXXXXXXXXXX
      17 .         .         .         .      I  .         .         .         .         .         .         .        LLXXXXXXXXXX
      18 .         .         .         .         .         I         .         .         .         .        LLXXXXXXXXXXXXXXXXXXXX
      19 .         .         .         .         .         .     I   .         .         .         .         .         . LLXXXXXXX
      20 .         .         .         .         .   I     .         .         .         .         .         .         . LLXXXXXXX
      21 .         .         .         .  I      .         .         .         .         .         .         .         .  LLXXXXXX
      22 .         .         .     I   .         .         .         .         .         .         .         .         .   LLXXXXX
      23 .         .         . I       .         .         .         .         .         .         .         .         .   LLXXXXX
      24 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
      25 .         .    I    .         .         .         .         .         .         .         .         .         .         L
      26 .      I  .         .         .         .         .         .         .         .         .         .         .         L
      27 .  I      .         .         .         .         .         .         .         .         .         .         .         L
      28 .I        .         .         .         .         .         .         .         .         .         .         .         L
      29 I         .         .         .         .         .         .         .         .         .         .         .         L
      30 I         .         .         .         .         .         .         .         .         .         .         .         L
      31 I         .         .         .         .         .         .         .         .         .         .         .         L
      32 I         .         .         .         .         .         .         .         .         .         .         .         L
      33 I         .         .         .         .         .         .         .         .         .         .         .         L
      34 I         .         .         .         .         .         .         .         .         .         .         .         L
      35 I         .         .         .         .         .         .         .         .         .         .         .         L
      36 I         .         .         .         .         .         .         .         .         .         .         .         L
      37 I         .         .         .         .         .         .         .         .         .         .         .         L
      38 I         .         .         .         .         .         .         .         .         .         .         .         L
      39 I         .         .         .         .         .         .         .         .         .         .         .         L
      40 I         .         .         .         .         .         .         .         .         .         .         .         L
      41 I         .         .         .         .         .         .         .         .         .         .         .         L
      42 I         .         .         .         .         .         .         .         .         .         .         .         L
      43 I         .         .         .         .         .         .         .         .         .         .         .         L
      44 I         .         .         .         .         .         .         .         .         .         .         .         L
      45 I         .         .         .         .         .         .         .         .         .         .         .         L
      46 I         .         .         .         .         .         .         .         .         .         .         .         L
      47 I         .         .         .         .         .         .         .         .         .         .         .         L
      48 I         .         .         .         .         .         .         .         .         .         .         .         L
      49 I         .         .         .         .         .         .         .         .         .         .         .         L
      50 I         .         .         .         .         .         .         .         .         .         .         .         L
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                                                  HYDROGRAPH BALANCE

                   BALANCED HYDROGRAPH LOCAL INFLOW   AT  RTE 280  (AREA B)  POINT 2

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                      2      88       0       0       0       0       1

            BALANCE DESIRED      1     1093.     24     8471.      0        0.      0        0.      0        0.
         BALANCE RESULTS            1093.            8471.               0.               0.               0.

NUMBER OF ITERATIONS=  4

                                             END-OF-PERIOD FLOWS AT     2
                                                    SUM=     8603.
                  9.       57.       95.      140.      218.      276.      280.      273.      285.      288.
                275.      272.      286.      343.      391.      437.      516.      691.     1093.      611.
                454.      358.      305.      278.      204.      102.       43.       17.        6.        2.
                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.

                                         PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                               CFS      1093.      634.      353.      172.          8603.
                            INCHES                 1.64      3.65      3.71           3.71
                             AC-FT                 314.      700.      711.           711.
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*OVF*
                                                 STATION     2

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
       0.      100.      200.      300.      400.      500.      600.      700.      800.      900.     1000.     1100.        0.
       1 .I        .         .         .         .         .         .         .         .         .         .         .         .
       2 .     I   .         .         .         .         .         .         .         .         .         .         .         .
       3 .         I         .         .         .         .         .         .         .         .         .         .         .
       4 .         .   I     .         .         .         .         .         .         .         .         .         .         .
       5 .         .         . I       .         .         .         .         .         .         .         .         .         .
       6 .         .         .       I .         .         .         .         .         .         .         .         .         .
       7 .         .         .       I .         .         .         .         .         .         .         .         .         .
       8 .         .         .      I  .         .         .         .         .         .         .         .         .         .
       9 .         .         .        I.         .         .         .         .         .         .         .         .         .
      10 .         .         .        I.         .         .         .         .         .         .         .         .         .
      11 .         .         .      I  .         .         .         .         .         .         .         .         .         .
      12 .         .         .      I  .         .         .         .         .         .         .         .         .         .
      13 .         .         .        I.         .         .         .         .         .         .         .         .         .
      14 .         .         .         .   I     .         .         .         .         .         .         .         .         .
      15 .         .         .         .        I.         .         .         .         .         .         .         .         .
      16 .         .         .         .         .   I     .         .         .         .         .         .         .         .
      17 .         .         .         .         .         . I       .         .         .         .         .         .         .
      18 .         .         .         .         .         .         .        I.         .         .         .         .         .
      19 .         .         .         .         .         .         .         .         .         .         .        I.         .
      20 .         .         .         .         .         .         .I        .         .         .         .         .         .
      21 .         .         .         .         .    I    .         .         .         .         .         .         .         .
      22 .         .         .         .     I   .         .         .         .         .         .         .         .         .
      23 .         .         .         I         .         .         .         .         .         .         .         .         .
      24 .         .         .       I .         .         .         .         .         .         .         .         .         .
      25 .         .         I         .         .         .         .         .         .         .         .         .         .
      26 .         I         .         .         .         .         .         .         .         .         .         .         .
      27 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      28 . I       .         .         .         .         .         .         .         .         .         .         .         .
      29 .I        .         .         .         .         .         .         .         .         .         .         .         .
      30 I         .         .         .         .         .         .         .         .         .         .         .         .
      31 I         .         .         .         .         .         .         .         .         .         .         .         .
      32 I         .         .         .         .         .         .         .         .         .         .         .         .
      33 I         .         .         .         .         .         .         .         .         .         .         .         .
      34 I         .         .         .         .         .         .         .         .         .         .         .         .
      35 I         .         .         .         .         .         .         .         .         .         .         .         .
      36 I         .         .         .         .         .         .         .         .         .         .         .         .
      37 I         .         .         .         .         .         .         .         .         .         .         .         .
      38 I         .         .         .         .         .         .         .         .         .         .         .         .
      39 I         .         .         .         .         .         .         .         .         .         .         .         .
      40 I         .         .         .         .         .         .         .         .         .         .         .         .
      41 I         .         .         .         .         .         .         .         .         .         .         .         .
      42 I         .         .         .         .         .         .         .         .         .         .         .         .
      43 I         .         .         .         .         .         .         .         .         .         .         .         .
      44 I         .         .         .         .         .         .         .         .         .         .         .         .
      45 I         .         .         .         .         .         .         .         .         .         .         .         .
      46 I         .         .         .         .         .         .         .         .         .         .         .         .
      47 I         .         .         .         .         .         .         .         .         .         .         .         .
      48 I         .         .         .         .         .         .         .         .         .         .         .         .
      49 I         .         .         .         .         .         .         .         .         .         .         .         .
      50 I         .         .         .         .         .         .         .         .         .         .         .         .
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                                                       COMBINE HYDROGRAPHS

                   COMBINE LOCAL INFLOW (AREA B) WITH FLOW ROUTED FROM  RESERVOIR   AT POINT 2

                                        ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                            2       2       0       0       0       0       1


                                                  SUM OF  2 HYDROGRAPHS AT      2
        67.       139.       195.       291.       487.       769.      1298.      1719.      2044.      2249.
      2363.      2432.      2486.      2610.      2811.      3175.      3602.      4206.      5880.      6617.
      5910.      4804.      4201.      3651.      3146.      2590.      2152.      1624.      1184.       855.
       614.       475.       397.       314.       240.       178.       136.       115.       106.       102.
       100.        99.        99.        99.        98.        98.        98.        98.        98.        97.

                                           PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                  CFS     6617.     5270.     3067.     1584.          79220.
                               INCHES                2.35      5.46      5.88            5.88
                                AC-FT               2614.     6087.     6550.           6550.
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*OVF*
                                                  STATION     2

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
        1 .I        .         .         .         .         .         .         .         .         .         .         .         .
        2 .I        .         .         .         .         .         .         .         .         .         .         .         .
        3 . I       .         .         .         .         .         .         .         .         .         .         .         .
        4 .  I      .         .         .         .         .         .         .         .         .         .         .         .
        5 .    I    .         .         .         .         .         .         .         .         .         .         .         .
        6 .       I .         .         .         .         .         .         .         .         .         .         .         .
        7 .         .  I      .         .         .         .         .         .         .         .         .         .         .
        8 .         .      I  .         .         .         .         .         .         .         .         .         .         .
        9 .         .         I         .         .         .         .         .         .         .         .         .         .
       10 .         .         . I       .         .         .         .         .         .         .         .         .         .
       11 .         .         .   I     .         .         .         .         .         .         .         .         .         .
       12 .         .         .   I     .         .         .         .         .         .         .         .         .         .
       13 .         .         .    I    .         .         .         .         .         .         .         .         .         .
       14 .         .         .     I   .         .         .         .         .         .         .         .         .         .
       15 .         .         .       I .         .         .         .         .         .         .         .         .         .
       16 .         .         .         . I       .         .         .         .         .         .         .         .         .
       17 .         .         .         .     I   .         .         .         .         .         .         .         .         .
       18 .         .         .         .         . I       .         .         .         .         .         .         .         .
       19 .         .         .         .         .         .        I.         .         .         .         .         .         .
       20 .         .         .         .         .         .         .     I   .         .         .         .         .         .
       21 .         .         .         .         .         .        I.         .         .         .         .         .         .
       22 .         .         .         .         .       I .         .         .         .         .         .         .         .
       23 .         .         .         .         . I       .         .         .         .         .         .         .         .
       24 .         .         .         .      I  .         .         .         .         .         .         .         .         .
       25 .         .         .         .I        .         .         .         .         .         .         .         .         .
       26 .         .         .     I   .         .         .         .         .         .         .         .         .         .
       27 .         .         . I       .         .         .         .         .         .         .         .         .         .
       28 .         .     I   .         .         .         .         .         .         .         .         .         .         .
       29 .         . I       .         .         .         .         .         .         .         .         .         .         .
       30 .        I.         .         .         .         .         .         .         .         .         .         .         .
       31 .     I   .         .         .         .         .         .         .         .         .         .         .         .
       32 .    I    .         .         .         .         .         .         .         .         .         .         .         .
       33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
       34 .  I      .         .         .         .         .         .         .         .         .         .         .         .
       35 . I       .         .         .         .         .         .         .         .         .         .         .         .
       36 . I       .         .         .         .         .         .         .         .         .         .         .         .
       37 .I        .         .         .         .         .         .         .         .         .         .         .         .
       38 .I        .         .         .         .         .         .         .         .         .         .         .         .
       39 .I        .         .         .         .         .         .         .         .         .         .         .         .
       40 .I        .         .         .         .         .         .         .         .         .         .         .         .
       41 .I        .         .         .         .         .         .         .         .         .         .         .         .
       42 .I        .         .         .         .         .         .         .         .         .         .         .         .
       43 .I        .         .         .         .         .         .         .         .         .         .         .         .
       44 .I        .         .         .         .         .         .         .         .         .         .         .         .
       45 .I        .         .         .         .         .         .         .         .         .         .         .         .
       46 .I        .         .         .         .         .         .         .         .         .         .         .         .
       47 .I        .         .         .         .         .         .         .         .         .         .         .         .
       48 .I        .         .         .         .         .         .         .         .         .         .         .         .
       49 .I        .         .         .         .         .         .         .         .         .         .         .         .
       50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

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                         RUNOFF SUMMARY, AVERAGE FLOW

                               PEAK    6-HOUR   24-HOUR   72-HOUR      AREA
HYDROGRAPH AT          1      7563.     4755.     2781.     1387.     17.30
ROUTED TO              1      6139.     4702.     2747.     1414.     17.30
ROUTED TO              2      6007.     4684.     2742.     1412.     17.30
HYDROGRAPH AT          2      1093.      634.      353.      172.      3.60
ROUTED TO              2      1093.      634.      353.      172.      3.60
 2 COMBINED            2      6617.     5270.     3067.     1584.     20.90
```

1-b

RESERVOIR 2000 AF
Unadjusted Hydrograph Volume

```
 ******************************
 HEC-1 VERSION DATED JAN 1973
 UPDATED AUG 74
 CHANGE NO. 01
 ******************************
                               STEVENS CREEK  HYDROLOGY   100 YEAR  FLOOD HYDROGRAPHS


                                                      JOB SPECIFICATION
                                          NQ    NHR   NMIN  IDAY   IHR  IMIN METRC  IPLT  IPRT NSTAN
                                          50      1      0     0     0     0     0     2     0     0
                                                          JOPER    NWT
                                                              3      0



                      **********          **********          **********          **********          **********

                                                      SUB-AREA RUNOFF COMPUTATION

                   RUNOFF HYDROGRAPH  INFLOW TO RESERVOIR   (AREA A)     POINT 1

                                          ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                              1        0        0        0        0        0        1

                                                       HYDROGRAPH DATA
                    IHYDG      IUHG     TAREA     SNAP    TRSDA    TRSPC    RATIO   ISNOW    ISAME    LOCAL
                        0         0     17.30     0.00     0.00     0.00    0.000       0        0        0

                                                         PRECIP DATA
                                                NP    STORM     DAJ      DAK
                                                24    10.18    0.00     0.00
                                                        PRECIP PATTERN
          1.66       2.32       2.16       3.49       4.32       3.66       3.32       3.82       3.82       3.49
          3.49       3.82       3.98       5.82       4.16       6.32       6.15      10.96       4.65       4.47
          3.82       3.49       3.49       3.32

                                                           LOSS DATA
                   STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
                   0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.130    0.000    0.000

                                                     UNIT HYDROGRAPH DATA
                                               TC=  2.30     R=  2.40     NTA=  6

                                                 UNIT GRAPH TIME-AREA ORDINATES
          0.15       3.18       6.70      10.55      15.00      17.30

                                                        RECESSION DATA
                                            STRTQ=    0.00    QRCSN=    0.00    RTIOR= 1.00

                 UNIT HYDROGRAPH 14 END-OF-PERIOD ORDINATES, LAG=   2.06 HOURS, CP= 0.52  VOL= 1.00
          820.      2294.      2607.      1875.      1228.       805.       527.       345.       226.       148.
           97.        64.        42.        27.

                                                     END-OF-PERIOD FLOW
                                                TIME   RAIN   EXCS    COMP Q
                                                  1 0.1690 0.0390       32.
                                                  2 0.2362 0.1062      176.
                                                  3 0.2199 0.0899      419.
                               4 0.3553 0.2253       741.
                               5 0.4398 0.3098      1252.
                               6 0.3726 0.2426      1827.
                               7 0.3380 0.2080      2173.
                               8 0.3889 0.2589      2321.
                               9 0.3889 0.2589      2458.
                              10 0.3553 0.2253      2570.
                              11 0.3553 0.2253      2594.
                              12 0.3889 0.2589      2599.
                              13 0.4052 0.2752      2670.
                              14 0.5925 0.4625      2935.
                              15 0.4235 0.2935      3322.
                              16 0.6434 0.5134      3668.
                              17 0.6261 0.4961      4111.
                              18 1.1157 0.9857      4985.
                              19 0.4734 0.3434      5907.
                              20 0.4550 0.3250      5907.
                              21 0.3889 0.2589      5193.
                              22 0.3553 0.2253      4454.
                              23 0.3553 0.2253      3834.
                              24 0.3380 0.2080      3366.
                              25 0.0000 0.0000      2853.
                              26 0.0000 0.0000      2132.
                              27 0.0000 0.0000      1427.
                              28 0.0000 0.0000       926.
                              29 0.0000 0.0000       602.
                              30 0.0000 0.0000       385.
                              31 0.0000 0.0000       243.
                              32 0.0000 0.0000       142.
                              33 0.0000 0.0000        87.
                              34 0.0000 0.0000        51.
                              35 0.0000 0.0000        29.
                              36 0.0000 0.0000        15.
                              37 0.0000 0.0000         6.
                              38 0.0000 0.0000         0.
                              39 0.0000 0.0000         0.
                              40 0.0000 0.0000         0.
                              41 0.0000 0.0000         0.
                              42 0.0000 0.0000         0.
                              43 0.0000 0.0000         0.
                              44 0.0000 0.0000         0.
                              45 0.0000 0.0000         0.
                              46 0.0000 0.0000         0.
                              47 0.0000 0.0000         0.
                              48 0.0000 0.0000         0.
                              49 0.0000 0.0000         0.
                              50 0.0000 0.0000         0.

                             SUM  10.22   7.10     78412.

                   PEAK    6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
          CFS     5907.     5093.      3145.      1568.         78412.
       INCHES                2.74       6.76       7.03           7.03
        AC-FT               2527.      6247.      6484.          6484.
```

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*OVF*
                                                 STATION      1

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
                                                                                                        PRECIP(L) AND EXCESS(X)
       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
        1 I         .         .         .         .         .         .         .         .         .         .         .     LLLXX
        2 . I       .         .         .         .         .         .         .         .         .         .         .   LLLXXXX
        3 .   I     .         .         .         .         .         .         .         .         .         .         .    LLLXXX
        4 .      I  .         .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
        5 .         .  I      .         .         .         .         .         .         .         .         .        LLLXXXXXXXXX
        6 .         .       I .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
        7 .         .         . I       .         .         .         .         .         .         .         .         . LLLXXXXXX
        8 .         .         .  I      .         .         .         .         .         .         .         .         LLLLXXXXXXX
        9 .         .         .    I    .         .         .         .         .         .         .         .         LLLLXXXXXXX
       10 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
       11 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
       12 .         .         .     I   .         .         .         .         .         .         .         .         LLLLXXXXXXX
       13 .         .         .      I  .         .         .         .         .         .         .         .         LLLXXXXXXXX
       14 .         .         .        I.         .         .         .         .         .         .         .    LLLXXXXXXXXXXXXX
       15 .         .         .         .  I      .         .         .         .         .         .         .        LLLLXXXXXXXX
       16 .         .         .         .      I  .         .         .         .         .         .         .   LLLXXXXXXXXXXXXXX
       17 .         .         .         .         .I        .         .         .         .         .         .   LLLLXXXXXXXXXXXXX
       18 .         .         .         .         .         I         .         .         .         .LLLXXXXXXXXXXXXXXXXXXXXXXXXXXX
       19 .         .         .         .         .         .        I.         .         .         .         .       LLLXXXXXXXXXX
       20 .         .         .         .         .         .        I.         .         .         .         .        LLLXXXXXXXXX
       21 .         .         .         .         .         . I       .         .         .         .         .         LLLLXXXXXXX
       22 .         .         .         .         .    I    .         .         .         .         .         .         .LLLXXXXXXX
       23 .         .         .         .       I .         .         .         .         .         .         .         .LLLXXXXXXX
       24 .         .         .         .   I     .         .         .         .         .         .         .         . LLLXXXXXX
       25 .         .         .        I.         .         .         .         .         .         .         .         .         L
       26 .         .         .I        .         .         .         .         .         .         .         .         .         L
       27 .         .   I     .         .         .         .         .         .         .         .         .         .         L
       28 .        I.         .         .         .         .         .         .         .         .         .         .         L
       29 .     I   .         .         .         .         .         .         .         .         .         .         .         L
       30 .   I     .         .         .         .         .         .         .         .         .         .         .         L
       31 . I       .         .         .         .         .         .         .         .         .         .         .         L
       32 .I        .         .         .         .         .         .         .         .         .         .         .         L
       33 .I        .         .         .         .         .         .         .         .         .         .         .         L
       34 .I        .         .         .         .         .         .         .         .         .         .         .         L
       35 I         .         .         .         .         .         .         .         .         .         .         .         L
       36 I         .         .         .         .         .         .         .         .         .         .         .         L
       37 I         .         .         .         .         .         .         .         .         .         .         .         L
       38 I         .         .         .         .         .         .         .         .         .         .         .         L
       39 I         .         .         .         .         .         .         .         .         .         .         .         L
       40 I         .         .         .         .         .         .         .         .         .         .         .         L
       41 I         .         .         .         .         .         .         .         .         .         .         .         L
       42 I         .         .         .         .         .         .         .         .         .         .         .         L
       43 I         .         .         .         .         .         .         .         .         .         .         .         L
       44 I         .         .         .         .         .         .         .         .         .         .         .         L
       45 I         .         .         .         .         .         .         .         .         .         .         .         L
       46 I         .         .         .         .         .         .         .         .         .         .         .         L
       47 I         .         .         .         .         .         .         .         .         .         .         .         L
       48 I         .         .         .         .         .         .         .         .         .         .         .         L
       49 I         .         .         .         .         .         .         .         .         .         .         .         L
       50 I         .         .         .         .         .         .         .         .         .         .         .         L
       *OVN*


                      **********          **********          **********          **********          **********
                                                          HYDROGRAPH BALANCE

                           BALANCED HYDROGRAPH INFLOW TO  RESERVOIR    AREA A

                                          ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                              1       88        0        0        0        0        1

                    BALANCE DESIRED       1     7563.      24    66752.       0         0.       0         0.       0         0.
                 BALANCE RESULTS             7563.            66752.               0.                0.                0.

       NUMBER OF ITERATIONS=  4

                                                     END-OF-PERIOD FLOWS AT      1
                                                            SUM=    69331.
                        19.        156.       370.       655.      1065.      1554.      1849.      1975.      2091.      2187.
                      2206.       2211.      2271.      2497.      2826.      3120.      3497.      4241.      7563.      5025.
                      4418.       3789.      3261.      2863.      2427.      1814.      1214.       788.       532.       340.
                       215.        125.        77.        45.        25.        13.         5.         0.         0.         0.
                         0.          0.         0.         0.         0.         0.         0.         0.         0.         0.

                                                PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
                                       CFS     7563.     4755.      2781.      1387.          69331.
                                    INCHES                2.56       5.98       6.21            6.21
                                     AC-FT               2359.      5520.      5733.           5733.
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*OVF*
                                                 STATION      1

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
       1 I         .         .         .         .         .         .         .         .         .         .         .         .
       2 . I       .         .         .         .         .         .         .         .         .         .         .         .
       3 .   I     .         .         .         .         .         .         .         .         .         .         .         .
       4 .      I  .         .         .         .         .         .         .         .         .         .         .         .
       5 .         .I        .         .         .         .         .         .         .         .         .         .         .
       6 .         .     I   .         .         .         .         .         .         .         .         .         .         .
       7 .         .       I .         .         .         .         .         .         .         .         .         .         .
       8 .         .         I         .         .         .         .         .         .         .         .         .         .
       9 .         .         .I        .         .         .         .         .         .         .         .         .         .
      10 .         .         . I       .         .         .         .         .         .         .         .         .         .
      11 .         .         . I       .         .         .         .         .         .         .         .         .         .
      12 .         .         . I       .         .         .         .         .         .         .         .         .         .
      13 .         .         .  I      .         .         .         .         .         .         .         .         .         .
      14 .         .         .    I    .         .         .         .         .         .         .         .         .         .
      15 .         .         .       I .         .         .         .         .         .         .         .         .         .
      16 .         .         .         .I        .         .         .         .         .         .         .         .         .
      17 .         .         .         .    I    .         .         .         .         .         .         .         .         .
      18 .         .         .         .         . I       .         .         .         .         .         .         .         .
      19 .         .         .         .         .         .         .         .     I   .         .         .         .         .
      20 .         .         .         .         .         I         .         .         .         .         .         .         .
      21 .         .         .         .         .   I     .         .         .         .         .         .         .         .
      22 .         .         .         .       I .         .         .         .         .         .         .         .         .
      23 .         .         .         .  I      .         .         .         .         .         .         .         .         .
      24 .         .         .        I.         .         .         .         .         .         .         .         .         .
      25 .         .         .   I     .         .         .         .         .         .         .         .         .         .
      26 .         .       I .         .         .         .         .         .         .         .         .         .         .
      27 .         . I       .         .         .         .         .         .         .         .         .         .         .
      28 .       I .         .         .         .         .         .         .         .         .         .         .         .
      29 .    I    .         .         .         .         .         .         .         .         .         .         .         .
      30 .  I      .         .         .         .         .         .         .         .         .         .         .         .
      31 . I       .         .         .         .         .         .         .         .         .         .         .         .
      32 .I        .         .         .         .         .         .         .         .         .         .         .         .
      33 .I        .         .         .         .         .         .         .         .         .         .         .         .
      34 I         .         .         .         .         .         .         .         .         .         .         .         .
      35 I         .         .         .         .         .         .         .         .         .         .         .         .
      36 I         .         .         .         .         .         .         .         .         .         .         .         .
      37 I         .         .         .         .         .         .         .         .         .         .         .         .
      38 I         .         .         .         .         .         .         .         .         .         .         .         .
      39 I         .         .         .         .         .         .         .         .         .         .         .         .
      40 I         .         .         .         .         .         .         .         .         .         .         .         .
      41 I         .         .         .         .         .         .         .         .         .         .         .         .
      42 I         .         .         .         .         .         .         .         .         .         .         .         .
      43 I         .         .         .         .         .         .         .         .         .         .         .         .
      44 I         .         .         .         .         .         .         .         .         .         .         .         .
      45 I         .         .         .         .         .         .         .         .         .         .         .         .
      46 I         .         .         .         .         .         .         .         .         .         .         .         .
      47 I         .         .         .         .         .         .         .         .         .         .         .         .
      48 I         .         .         .         .         .         .         .         .         .         .         .         .
      49 I         .         .         .         .         .         .         .         .         .         .         .         .
      50 I         .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

          **********          **********          **********          **********          **********

                                              HYDROGRAPH ROUTING

                    ROUTE FLOW  THRU RESERVOIR   POINT 1

                                ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                    1        1        0        0        0        0        1
                                                      ROUTING DATA
                                         QLOSS    CLOSS      AVG     IRES    ISAME
                                           0.0    0.000     0.00        1        0

                                NSTPS    NSTDL      LAG    AMSKK        X      TSK    STORA
                                    0        0        0    0.000    0.000    0.000    2000.

 STORAGE=           0.      3804.      3899.      3995.      4092.      4191.      4292.      4394.      4498.      4604.
 OUTFLOW=           0.       100.       557.      1408.      2529.      3880.      5438.      7192.      9127.     11243.

                                        TIME  EOP STOR    AVG IN   EOP OUT
                                           1     1997.       19.       53.
                                           2     2000.       87.       53.
                                           3     2017.      263.       53.
                                           4     2055.      513.       54.
                                           5     2122.      860.       56.
                                           6     2225.     1310.       59.
                                           7     2361.     1702.       62.
                                           8     2514.     1912.       66.
                                           9     2676.     2033.       70.
                                          10     2847.     2139.       75.
                                          11     3022.     2196.       79.
                                          12     3198.     2209.       84.
                                          13     3376.     2241.       89.
                                          14     3565.     2384.       94.
                                          15     3777.     2662.       99.
                                          16     3970.     2973.     1186.
                                          17     4091.     3309.     2513.
                                          18     4162.     3869.     3489.
                                          19     4285.     5902.     5336.
                                          20     4337.     6294.     6125.
                                          21     4263.     4721.     4989.
                                          22     4218.     4103.     4299.
                                          23     4179.     3525.     3710.
                                          24     4144.     3062.     3243.
                                          25     4113.     2645.     2812.
                                          26     4075.     2120.     2336.
                                          27     4029.     1514.     1804.
                                          28     3983.     1001.     1306.
                                          29     3944.      660.      960.
                                          30     3913.      436.      679.
                                          31     3887.      278.      499.
                                          32     3864.      170.      390.
                                          33     3844.      101.      294.
                                          34     3828.       61.      217.
                                          35     3816.       35.      157.
                                          36     3806.       19.      111.
                                          37     3798.        9.      100.
                                          38     3790.        3.      100.
```

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                         39     3782.         0.        99.
                         40     3774.         0.        99.
                         41     3766.         0.        99.
                         42     3758.         0.        99.
                         43     3749.         0.        99.
                         44     3741.         0.        98.
                         45     3733.         0.        98.
                         46     3725.         0.        98.
                         47     3717.         0.        98.
                         48     3709.         0.        97.
                         49     3701.         0.        97.
                         50     3693.         0.        97.

                        SUM                          48880.

                     PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
            CFS     6125.     4658.      1948.       978.          48880.
         INCHES                2.50       4.19       4.38            4.38
          AC-FT               2311.      3866.      4042.           4042.
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*OVF*
                                                     STATION     1

                                   INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
   0.      1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
  1 I0        .         .         .         .         .         .         .         .         .         .         .         .
  2 .I        .         .         .         .         .         .         .         .         .         .         .         .
  3 .0 I      .         .         .         .         .         .         .         .         .         .         .         .
  4 .0   I    .         .         .         .         .         .         .         .         .         .         .         .
  5 .0       I.         .         .         .         .         .         .         .         .         .         .         .
  6 .0        .  I      .         .         .         .         .         .         .         .         .         .         .
  7 .0        .      I  .         .         .         .         .         .         .         .         .         .         .
  8 .0        .        I.         .         .         .         .         .         .         .         .         .         .
  9 .0        .         I         .         .         .         .         .         .         .         .         .         .
 10 .0        .         .I        .         .         .         .         .         .         .         .         .         .
 11 .0        .         . I       .         .         .         .         .         .         .         .         .         .
 12 .0        .         . I       .         .         .         .         .         .         .         .         .         .
 13 .0        .         . I       .         .         .         .         .         .         .         .         .         .
 14 .0        .         .   I     .         .         .         .         .         .         .         .         .         .
 15 .0        .         .      I  .         .         .         .         .         .         .         .         .         .
 16 .         . 0       .         I         .         .         .         .         .         .         .         .         .
 17 .         .         .    0    .  I      .         .         .         .         .         .         .         .         .
 18 .         .         .         .    0   I.         .         .         .         .         .         .         .         .
 19 .         .         .         .         .         .  0     I.         .         .         .         .         .         .
 20 .         .         .         .         .         .         .0 I      .         .         .         .         .         .
 21 .         .         .         .         .      I  0         .         .         .         .         .         .         .
 22 .         .         .         .         .I 0      .         .         .         .         .         .         .         .
 23 .         .         .         .    I 0  .         .         .         .         .         .         .         .         .
 24 .         .         .         .I0       .         .         .         .         .         .         .         .         .
 25 .         .         .     I 0 .         .         .         .         .         .         .         .         .         .
 26 .         .         .I 0      .         .         .         .         .         .         .         .         .         .
 27 .         .    I  0 .         .         .         .         .         .         .         .         .         .         .
 28 .         I  0      .         .         .         .         .         .         .         .         .         .         .
 29 .      I  0         .         .         .         .         .         .         .         .         .         .         .
 30 .   I  0  .         .         .         .         .         .         .         .         .         .         .         .
 31 .  I 0    .         .         .         .         .         .         .         .         .         .         .         .
 32 . I 0     .         .         .         .         .         .         .         .         .         .         .         .
 33 .I 0      .         .         .         .         .         .         .         .         .         .         .         .
 34 .I0       .         .         .         .         .         .         .         .         .         .         .         .
 35 I 0       .         .         .         .         .         .         .         .         .         .         .         .
 36 I0        .         .         .         .         .         .         .         .         .         .         .         .
 37 I0        .         .         .         .         .         .         .         .         .         .         .         .
 38 I0        .         .         .         .         .         .         .         .         .         .         .         .
 39 I0        .         .         .         .         .         .         .         .         .         .         .         .
 40 I0        .         .         .         .         .         .         .         .         .         .         .         .
 41 I0        .         .         .         .         .         .         .         .         .         .         .         .
 42 I0        .         .         .         .         .         .         .         .         .         .         .         .
 43 I0        .         .         .         .         .         .         .         .         .         .         .         .
 44 I0        .         .         .         .         .         .         .         .         .         .         .         .
 45 I0        .         .         .         .         .         .         .         .         .         .         .         .
 46 I0        .         .         .         .         .         .         .         .         .         .         .         .
 47 I0        .         .         .         .         .         .         .         .         .         .         .         .
 48 I0        .         .         .         .         .         .         .         .         .         .         .         .
 49 I0        .         .         .         .         .         .         .         .         .         .         .         .
 50 I0        .         .         .         .         .         .         .         .         .         .         .         .
 *OVN*

               **********          **********          **********          **********          **********

                                                    HYDROGRAPH ROUTING

                 ROUTE  STEVENS CREEK RESERVOIR OUTFLOW  DOWN TO  RTE 280    POINT 2

                                      ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                          2       1       0       0       0       0       1
                                                          ROUTING DATA
                                              QLOSS   CLOSS     AVG    IRES   ISAME
                                                0.0   0.000    0.00       1       0

                                      NSTPS   NSTDL     LAG   AMSKK       X     TSK   STORA
                                          0       0       0   0.000   0.000   0.000      0.

        STORAGE=         0.        50.       100.       150.       250.       380.         0.         0.         0.         0.
        OUTFLOW=         0.       500.      1500.      2500.      6500.     13000.         0.         0.         0.         0.

                                              TIME  EOP STOR   AVG IN   EOP OUT
                                                 1        3.      53.       31.
                                                 2        4.      53.       43.
                                                 3        5.      53.       49.
                                                 4        5.      54.       52.
                                                 5        5.      55.       54.
                                                 6        6.      57.       56.
                                                 7        6.      60.       58.
                                                 8        6.      64.       62.
                                                 9        7.      68.       66.
                                                10        7.      73.       70.
                                                11        7.      77.       74.
                                                12        8.      82.       79.
                                                13        8.      86.       83.
                                                14        9.      91.       88.
                                                15        9.      97.       93.
                                                16       41.     643.      415.
                                                17      108.    1850.     1666.
                                                18      163.    3001.     3015.
                                                19      206.    4413.     4757.
                                                20      237.    5731.     5971.
                                                21      224.    5557.     5455.
                                                22      199.    4644.     4445.
                                                23      185.    4005.     3896.
                                                24      172.    3476.     3373.
                                                25      161.    3027.     2942.
                                                26      149.    2574.     2433.
                                                27      130.    2070.     2110.
                                                28      105.    1555.     1608.
                                                29       84.    1133.     1178.
                                                30       68.     819.      853.
                                                31       56.     589.      614.
                                                32       47.     445.      475.
                                                33       40.     342.      397.
                                                34       31.     256.      314.
                                                35       24.     187.      240.
                                                36       18.     134.      178.
                                                37       14.     105.      136.
                                                38       11.     100.      115.
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                  39         11.        100.        106.
                  40         10.         99.        102.
                  41         10.         99.        100.
                  42         10.         99.         99.
                  43         10.         99.         99.
                  44         10.         98.         99.
                  45         10.         98.         98.
                  46         10.         98.         98.
                  47         10.         98.         98.
                  48         10.         98.         98.
                  49         10.         97.         98.
                  50         10.         97.         97.

                 SUM                              48788.

               PEAK     6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
      CFS     5971.      4649.      1948.       976.         48788.
   INCHES                 2.50       4.19       4.37           4.37
    AC-FT                2307.      3865.      4034.          4034.
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*OVF*
                                            STATION     2

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
  1 OI        .         .         .         .         .         .         .         .         .         .         .         .
  2 OI        .         .         .         .         .         .         .         .         .         .         .         .
  3 OI        .         .         .         .         .         .         .         .         .         .         .         .
  4 .I        .         .         .         .         .         .         .         .         .         .         .         .
  5 .I        .         .         .         .         .         .         .         .         .         .         .         .
  6 .I        .         .         .         .         .         .         .         .         .         .         .         .
  7 .I        .         .         .         .         .         .         .         .         .         .         .         .
  8 .I        .         .         .         .         .         .         .         .         .         .         .         .
  9 .I        .         .         .         .         .         .         .         .         .         .         .         .
 10 .I        .         .         .         .         .         .         .         .         .         .         .         .
 11 .I        .         .         .         .         .         .         .         .         .         .         .         .
 12 .I        .         .         .         .         .         .         .         .         .         .         .         .
 13 .I        .         .         .         .         .         .         .         .         .         .         .         .
 14 .I        .         .         .         .         .         .         .         .         .         .         .         .
 15 .I        .         .         .         .         .         .         .         .         .         .         .         .
 16 .   O I   .         .         .         .         .         .         .         .         .         .         .         .
 17 .         .      OI .         .         .         .         .         .         .         .         .         .         .
 18 .         .         .         I         .         .         .         .         .         .         .         .         .
 19 .         .         .         .         .   I   O .         .         .         .         .         .         .         .
 20 .         .         .         .         .         .      I  O         .         .         .         .         .         .
 21 .         .         .         .         .         .    OI   .         .         .         .         .         .         .
 22 .         .         .         .         .   O I   .         .         .         .         .         .         .         .
 23 .         .         .         .        OI         .         .         .         .         .         .         .         .
 24 .         .         .         .   OI    .         .         .         .         .         .         .         .         .
 25 .         .         .        OI         .         .         .         .         .         .         .         .         .
 26 .         .         .    OI   .         .         .         .         .         .         .         .         .         .
 27 .         .         .I        .         .         .         .         .         .         .         .         .         .
 28 .         .     I   .         .         .         .         .         .         .         .         .         .         .
 29 .         .IO       .         .         .         .         .         .         .         .         .         .         .
 30 .       IO.         .         .         .         .         .         .         .         .         .         .         .
 31 .     I   .         .         .         .         .         .         .         .         .         .         .         .
 32 .   IO    .         .         .         .         .         .         .         .         .         .         .         .
 33 .  IO     .         .         .         .         .         .         .         .         .         .         .         .
 34 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 35 . I       .         .         .         .         .         .         .         .         .         .         .         .
 36 .IO       .         .         .         .         .         .         .         .         .         .         .         .
 37 .I        .         .         .         .         .         .         .         .         .         .         .         .
 38 .I        .         .         .         .         .         .         .         .         .         .         .         .
 39 .I        .         .         .         .         .         .         .         .         .         .         .         .
 40 .I        .         .         .         .         .         .         .         .         .         .         .         .
 41 .I        .         .         .         .         .         .         .         .         .         .         .         .
 42 .I        .         .         .         .         .         .         .         .         .         .         .         .
 43 .I        .         .         .         .         .         .         .         .         .         .         .         .
 44 .I        .         .         .         .         .         .         .         .         .         .         .         .
 45 .I        .         .         .         .         .         .         .         .         .         .         .         .
 46 .I        .         .         .         .         .         .         .         .         .         .         .         .
 47 .I        .         .         .         .         .         .         .         .         .         .         .         .
 48 .I        .         .         .         .         .         .         .         .         .         .         .         .
 49 .I        .         .         .         .         .         .         .         .         .         .         .         .
 50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*



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                                       SUB-AREA RUNOFF COMPUTATION

          RUNOFF HYDROGRAPH LOCAL INFLOW  AT RTE 280  (AREA B)   POINT 2

                           ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                               2        0        0        0        0        0        1

                                             HYDROGRAPH DATA
          IHYDG      IUHG    TAREA      SNAP    TRSDA    TRSPC    RATIO    ISNOW    ISAME    LOCAL
              0         0     3.60      0.00     0.00     0.00    0.000        0        0        0

                                                 PRECIP DATA
                                       NP    STORM      DAJ       DAK
                                       24     7.01     0.00      0.00
                                               PRECIP PATTERN
    1.61       2.42       2.10       3.39       4.19       3.71       3.23       3.71       3.87       3.39
    3.39       3.71       3.87       5.64       4.19       6.61       6.29      11.77       4.67       4.36
    3.71       3.39       3.55       3.23

                                                  LOSS DATA
         STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
         0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.090    0.000    0.150

                                             UNIT HYDROGRAPH DATA
                                   TC=  1.50     R=  1.20     NTA=  0

                                                RECESSION DATA
                               STRTQ=     0.00     QRCSN=     0.00     RTIOR= 1.00

          UNIT HYDROGRAPH  7 END-OF-PERIOD ORDINATES, LAG=   1.38 HOURS, CP= 0.60  VOL= 1.00
    497.       888.       551.       227.        93.        38.        16.

                                           END-OF-PERIOD FLOW
                                      TIME   RAIN   EXCS    COMP Q
                                         1 0.1129 0.0364       18.
                                         2 0.1696 0.0931       79.
                                         3 0.1472 0.0707      138.
                                         4 0.2376 0.1611      202.
                                         5 0.2937 0.2172      315.
                                         6 0.2601 0.1836      399.
                                         7 0.2264 0.1499      405.
                                         8 0.2601 0.1836      394.
                                         9 0.2713 0.1948      412.
                                        10 0.2376 0.1611      410.
                                        11 0.2376 0.1611      397.
                                        12 0.2601 0.1836      393.
                                        13 0.2713 0.1948      413.
                                        14 0.3954 0.3189      495.
                                        15 0.2937 0.2172      564.
                                        16 0.4634 0.3869      631.
                                        17 0.4409 0.3644      745.
                                        18 0.8251 0.7486      998.
                                        19 0.3274 0.2509     1114.
                                        20 0.3056 0.2291      882.
                                        21 0.2601 0.1836      655.
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                       22 0.2376 0.1611        516.
                       23 0.2489 0.1724        440.
                       24 0.2264 0.1699        401.
                       25 0.0000 0.0000        295.
                       26 0.0000 0.0000        148.
                       27 0.0000 0.0000         59.
                       28 0.0000 0.0000         23.
                       29 0.0000 0.0000          9.
                       30 0.0000 0.0000          2.
                       31 0.0000 0.0000          0.
                       32 0.0000 0.0000          0.
                       33 0.0000 0.0000          0.
                       34 0.0000 0.0000          0.
                       35 0.0000 0.0000          0.
                       36 0.0000 0.0000          0.
                       37 0.0000 0.0000          0.
                       38 0.0000 0.0000          0.
                       39 0.0000 0.0000          0.
                       40 0.0000 0.0000          0.
                       41 0.0000 0.0000          0.
                       42 0.0000 0.0000          0.
                       43 0.0000 0.0000          0.
                       44 0.0000 0.0000          0.
                       45 0.0000 0.0000          0.
                       46 0.0000 0.0000          0.
                       47 0.0000 0.0000          0.
                       48 0.0000 0.0000          0.
                       49 0.0000 0.0000          0.
                       50 0.0000 0.0000          0.

                      SUM   7.03   5.15      11958.

                PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
       CFS      1114.     837.      490.      239.         11957.
    INCHES               2.16      5.07      5.15           5.15
     AC-FT                415.      973.      989.           989.
     *OVF*
                                                     STATION      2

                                 INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
            0.      200.      400.      600.      800.     1000.     1200.        0.        0.        0.        0.        0.        0.
                                                                                                            PRECIP(L) AND EXCESS(X)
           0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
            1 .I        .         .         .         .         .         .         .         .         .         .         .      LLXX
            2 .   I     .         .         .         .         .         .         .         .         .         .         .     LLXXX
            3 .      I  .         .         .         .         .         .         .         .         .         .         .     LLXXX
            4 .         I         .         .         .         .         .         .         .         .         .         .   LLXXXXX
            5 .         .     I   .         .         .         .         .         .         .         .         .         .  LLXXXXXX
            6 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
            7 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
            8 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
            9 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
           10 .         .         .I        .         .         .         .         .         .         .         .         .   LLXXXXX
           11 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
           12 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
           13 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
           14 .         .         .    I    .         .         .         .         .         .         .         .         LLXXXXXXXXX
           15 .         .         .       I .         .         .         .         .         .         .         .         .  LLXXXXXX
           16 .         .         .         . I       .         .         .         .         .         .         .       LLXXXXXXXXXXX
           17 .         .         .         .       I .         .         .         .         .         .         .        LLXXXXXXXXXX
           18 .         .         .         .         .         I         .         .         .         .        LLXXXXXXXXXXXXXXXXXXXX
           19 .         .         .         .         .         .     I   .         .         .         .         .         . LLXXXXXXX
           20 .         .         .         .         .   I     .         .         .         .         .         .         . LLXXXXXXX
           21 .         .         .         .  I      .         .         .         .         .         .         .         .  LLXXXXXX
           22 .         .         .     I   .         .         .         .         .         .         .         .         .   LLXXXXX
           23 .         .         . I       .         .         .         .         .         .         .         .         .   LLXXXXX
           24 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
           25 .         .    I    .         .         .         .         .         .         .         .         .         .         L
           26 .      I  .         .         .         .         .         .         .         .         .         .         .         L
           27 .  I      .         .         .         .         .         .         .         .         .         .         .         L
           28 .I        .         .         .         .         .         .         .         .         .         .         .         L
           29 I         .         .         .         .         .         .         .         .         .         .         .         L
           30 I         .         .         .         .         .         .         .         .         .         .         .         L
           31 I         .         .         .         .         .         .         .         .         .         .         .         L
           32 I         .         .         .         .         .         .         .         .         .         .         .         L
           33 I         .         .         .         .         .         .         .         .         .         .         .         L
           34 I         .         .         .         .         .         .         .         .         .         .         .         L
           35 I         .         .         .         .         .         .         .         .         .         .         .         L
           36 I         .         .         .         .         .         .         .         .         .         .         .         L
           37 I         .         .         .         .         .         .         .         .         .         .         .         L
           38 I         .         .         .         .         .         .         .         .         .         .         .         L
           39 I         .         .         .         .         .         .         .         .         .         .         .         L
           40 I         .         .         .         .         .         .         .         .         .         .         .         L
           41 I         .         .         .         .         .         .         .         .         .         .         .         L
           42 I         .         .         .         .         .         .         .         .         .         .         .         L
           43 I         .         .         .         .         .         .         .         .         .         .         .         L
           44 I         .         .         .         .         .         .         .         .         .         .         .         L
           45 I         .         .         .         .         .         .         .         .         .         .         .         L
           46 I         .         .         .         .         .         .         .         .         .         .         .         L
           47 I         .         .         .         .         .         .         .         .         .         .         .         L
           48 I         .         .         .         .         .         .         .         .         .         .         .         L
           49 I         .         .         .         .         .         .         .         .         .         .         .         .
           50 I         .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

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                                                  HYDROGRAPH BALANCE

                   BALANCED HYDROGRAPH LOCAL INFLOW   AT  RTE 280  (AREA 8)  POINT 2

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                      2      88       0       0       0       0       1

            BALANCE DESIRED      1     1093.     24     8471.      0        0.       0        0.     0         0.
         BALANCE RESULTS            1093.            8471.                0.               0.               0.

NUMBER OF ITERATIONS=  4

                                             END-OF-PERIOD FLOWS AT     2
                                                    SUN=     8603.
                 9.       57.       95.      140.      218.      276.      280.      273.      285.      288.
               275.      272.      286.      343.      391.      437.      516.      691.     1093.      611.
               454.      358.      305.      278.      204.      102.       43.       17.        6.        2.
                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.

                                        PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                               CFS     1093.      634.      353.      172.          8603.
                            INCHES                1.64      3.65      3.71           3.71
                             AC-FT                314.      700.      711.           711.
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*OVF*

                                           STATION     2


                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.      100.      200.      300.      400.      500.      600.      700.      800.      900.     1000.     1100.        0.
  1 .I        .         .         .         .         .         .         .         .         .         .         .         .
  2 .     I   .         .         .         .         .         .         .         .         .         .         .         .
  3 .         I         .         .         .         .         .         .         .         .         .         .         .
  4 .         .   I     .         .         .         .         .         .         .         .         .         .         .
  5 .         .         . I       .         .         .         .         .         .         .         .         .         .
  6 .         .         .       I .         .         .         .         .         .         .         .         .         .
  7 .         .         .       I .         .         .         .         .         .         .         .         .         .
  8 .         .         .      I  .         .         .         .         .         .         .         .         .         .
  9 .         .         .        I.         .         .         .         .         .         .         .         .         .
 10 .         .         .        I.         .         .         .         .         .         .         .         .         .
 11 .         .         .      I  .         .         .         .         .         .         .         .         .         .
 12 .         .         .      I  .         .         .         .         .         .         .         .         .         .
 13 .         .         .        I.         .         .         .         .         .         .         .         .         .
 14 .         .         .         .   I     .         .         .         .         .         .         .         .         .
 15 .         .         .         .        I.         .         .         .         .         .         .         .         .
 16 .         .         .         .         .   I     .         .         .         .         .         .         .         .
 17 .         .         .         .         .         . I       .         .         .         .         .         .         .
 18 .         .         .         .         .         .        I.         .         .         .         .         .         .
 19 .         .         .         .         .         .         .         .         .         .        I.         .         .
 20 .         .         .         .         .         .I        .         .         .         .         .         .         .
 21 .         .         .         .         .    I    .         .         .         .         .         .         .         .
 22 .         .         .         .     I   .         .         .         .         .         .         .         .         .
 23 .         .         .         I         .         .         .         .         .         .         .         .         .
 24 .         .         .       I .         .         .         .         .         .         .         .         .         .
 25 .         .         I         .         .         .         .         .         .         .         .         .         .
 26 .         I         .         .         .         .         .         .         .         .         .         .         .
 27 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 28 . I       .         .         .         .         .         .         .         .         .         .         .         .
 29 .I        .         .         .         .         .         .         .         .         .         .         .         .
 30 I         .         .         .         .         .         .         .         .         .         .         .         .
 31 I         .         .         .         .         .         .         .         .         .         .         .         .
 32 I         .         .         .         .         .         .         .         .         .         .         .         .
 33 I         .         .         .         .         .         .         .         .         .         .         .         .
 34 I         .         .         .         .         .         .         .         .         .         .         .         .
 35 I         .         .         .         .         .         .         .         .         .         .         .         .
 36 I         .         .         .         .         .         .         .         .         .         .         .         .
 37 I         .         .         .         .         .         .         .         .         .         .         .         .
 38 I         .         .         .         .         .         .         .         .         .         .         .         .
 39 I         .         .         .         .         .         .         .         .         .         .         .         .
 40 I         .         .         .         .         .         .         .         .         .         .         .         .
 41 I         .         .         .         .         .         .         .         .         .         .         .         .
 42 I         .         .         .         .         .         .         .         .         .         .         .         .
 43 I         .         .         .         .         .         .         .         .         .         .         .         .
 44 I         .         .         .         .         .         .         .         .         .         .         .         .
 45 I         .         .         .         .         .         .         .         .         .         .         .         .
 46 I         .         .         .         .         .         .         .         .         .         .         .         .
 47 I         .         .         .         .         .         .         .         .         .         .         .         .
 48 I         .         .         .         .         .         .         .         .         .         .         .         .
 49 I         .         .         .         .         .         .         .         .         .         .         .         .
 50 I         .         .         .         .         .         .         .         .         .         .         .         .
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                                                    COMBINE HYDROGRAPHS

                         COMBINE LOCAL INFLOW (AREA B) WITH FLOW ROUTED FROM  RESERVOIR   AT POINT 2

                                         ISTAQ     ICOMP     IECON     ITAPE     JPLT     JPRT    INAME
                                             2         2         0         0        0        0        1

                                                   SUM OF 2 HYDROGRAPHS AT      2
     39.      100.      144.      192.      271.      332.      339.      335.      351.      358.
    349.      351.      369.      430.      484.      852.     2182.     3707.     5850.     6581.
   5909.     4802.     4201.     3651.     3146.     2590.     2152.     1624.     1184.      855.
    614.      475.      397.      314.      240.      178.      136.      115.      106.      102.
    100.       99.       99.       99.       98.       98.       98.       98.       98.       97.

                                               PEAK    6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
                                     CFS      6581.     5175.     2213.      1148.         57392.
                                  INCHES                 2.30      3.94       4.26           4.26
                                   AC-FT                2567.     4392.      4746.          4746.
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*OVF*
                                             STATION     2

                        INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
   0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
   1 I         .         .         .         .         .         .         .         .         .         .         .         .
   2 .I        .         .         .         .         .         .         .         .         .         .         .         .
   3 .I        .         .         .         .         .         .         .         .         .         .         .         .
   4 . I       .         .         .         .         .         .         .         .         .         .         .         .
   5 .  I      .         .         .         .         .         .         .         .         .         .         .         .
   6 .  I      .         .         .         .         .         .         .         .         .         .         .         .
   7 .  I      .         .         .         .         .         .         .         .         .         .         .         .
   8 .  I      .         .         .         .         .         .         .         .         .         .         .         .
   9 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  10 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  11 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  12 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  13 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  14 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  15 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  16 .        I.         .         .         .         .         .         .         .         .         .         .         .
  17 .         .         . I       .         .         .         .         .         .         .         .         .         .
  18 .         .         .         .      I  .         .         .         .         .         .         .         .         .
  19 .         .         .         .         .         .       I .         .         .         .         .         .         .
  20 .         .         .         .         .         .         .     I   .         .         .         .         .         .
  21 .         .         .         .         .         .        I.         .         .         .         .         .         .
  22 .         .         .         .         .       I .         .         .         .         .         .         .         .
  23 .         .         .         .         . I       .         .         .         .         .         .         .         .
  24 .         .         .         .      I  .         .         .         .         .         .         .         .         .
  25 .         .         .         .I        .         .         .         .         .         .         .         .         .
  26 .         .         .     I   .         .         .         .         .         .         .         .         .         .
  27 .         .         . I       .         .         .         .         .         .         .         .         .         .
  28 .         .     I   .         .         .         .         .         .         .         .         .         .         .
  29 .         . I       .         .         .         .         .         .         .         .         .         .         .
  30 .        I.         .         .         .         .         .         .         .         .         .         .         .
  31 .     I   .         .         .         .         .         .         .         .         .         .         .         .
  32 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  34 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  35 . I       .         .         .         .         .         .         .         .         .         .         .         .
  36 . I       .         .         .         .         .         .         .         .         .         .         .         .
  37 .I        .         .         .         .         .         .         .         .         .         .         .         .
  38 .I        .         .         .         .         .         .         .         .         .         .         .         .
  39 .I        .         .         .         .         .         .         .         .         .         .         .         .
  40 .I        .         .         .         .         .         .         .         .         .         .         .         .
  41 .I        .         .         .         .         .         .         .         .         .         .         .         .
  42 .I        .         .         .         .         .         .         .         .         .         .         .         .
  43 .I        .         .         .         .         .         .         .         .         .         .         .         .
  44 .I        .         .         .         .         .         .         .         .         .         .         .         .
  45 .I        .         .         .         .         .         .         .         .         .         .         .         .
  46 .I        .         .         .         .         .         .         .         .         .         .         .         .
  47 .I        .         .         .         .         .         .         .         .         .         .         .         .
  48 .I        .         .         .         .         .         .         .         .         .         .         .         .
  49 .I        .         .         .         .         .         .         .         .         .         .         .         .
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                                  RUNOFF SUMMARY, AVERAGE FLOW

                                      PEAK     6-HOUR    24-HOUR    72-HOUR       AREA
HYDROGRAPH AT             1          7563.      4755.      2701.      1307.      17.30
ROUTED TO                 1          6125.      4658.      1948.       978.      17.30
ROUTED TO                 2          5971.      4649.      1948.       976.      17.30
HYDROGRAPH AT             2          1093.       634.       353.       172.       3.60
ROUTED TO                 2          1093.       634.       353.       172.       3.60
 2 COMBINED               2          6501.      5175.      2213.      1148.      20.90
```

1_C

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******************************
HEC-1 VERSION DATED JAN 1973
UPDATED AUG 74
CHANGE NO. 01
******************************
                  STEVENS CREEK  HYDROLOGY   100 YEAR  FLOOD HYDROGRAPHS
```

RESERVOIR EMPTY 0 AF

Unadjusted Hydrograph Volume

```
                                              JOB SPECIFICATION
                           NQ    NHR   NMIN  IDAY    IHR  IMIN METRC   IPLT   IPRT NSTAN
                           50      1      0     0      0     0     0      2      0     0
                                                JOPER      NWT
                                                    3        0



              **********          **********          **********          **********          **********

                                         SUB-AREA RUNOFF COMPUTATION

                 RUNOFF HYDROGRAPH  INFLOW TO RESERVOIR   (AREA A)     POINT 1

                            ISTAQ     ICOMP     IECON     ITAPE      JPLT      JPRT     INAME
                                1         0         0         0         0         0         1

                                              HYDROGRAPH DATA
               IHYDG     IUHG    TAREA      SNAP     TRSDA     TRSPC     RATIO     ISNOW     ISAME     LOCAL
                   0        0    17.30      0.00      0.00      0.00     0.000         0         0         0

                                               PRECIP DATA
                                           NP    STORM      DAJ       DAK
                                           24    10.18     0.00      0.00
                                              PRECIP PATTERN
    1.66        2.32        2.16        3.49        4.32        3.66        3.32        3.82        3.82        3.49
    3.49        3.82        3.99        5.82        4.16        6.32        6.15       10.96        4.65        4.47
    3.82        3.49        3.49        3.32

                                                 LOSS DATA
          STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
          0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.130    0.000    0.000

                                           UNIT HYDROGRAPH DATA
                                     TC=  2.30     R=  2.40     NTA=  6

                                         UNIT GRAPH TIME-AREA ORDINATES
    0.15        3.18        6.70       10.55       15.00       17.30

                                              RECESSION DATA
                               STRTQ=     0.00     QRCSN=     0.00     RTIOR= 1.00

        UNIT HYDROGRAPH 14 END-OF-PERIOD ORDINATES, LAG=    2.06 HOURS, CP= 0.52  VOL= 1.00
    820.        2294.       2607.       1875.       1228.        905.        527.        345.        226.        148.
     97.         64.         42.         27.

                                             END-OF-PERIOD FLOW
                                         TIME    RAIN   EXCS      COMP Q
                                            1 0.1690 0.0390         32.
                                            2 0.2362 0.1062        176.
                                            3 0.2199 0.0899        419.
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                         4 0.3553 0.2253      741.
                         5 0.4398 0.3098     1252.
                         6 0.3726 0.2426     1827.
                         7 0.3380 0.2080     2173.
                         8 0.3889 0.2589     2321.
                         9 0.3889 0.2589     2458.
                        10 0.3553 0.2253     2570.
                        11 0.3553 0.2253     2594.
                        12 0.3889 0.2589     2599.
                        13 0.4052 0.2752     2670.
                        14 0.5925 0.4625     2935.
                        15 0.4235 0.2935     3322.
                        16 0.6434 0.5134     3668.
                        17 0.6261 0.4961     4111.
                        18 1.1157 0.9857     4985.
                        19 0.4734 0.3434     5907.
                        20 0.4550 0.3250     5907.
                        21 0.3889 0.2589     5193.
                        22 0.3553 0.2253     4454.
                        23 0.3553 0.2253     3834.
                        24 0.3380 0.2080     3366.
                        25 0.0000 0.0000     2853.
                        26 0.0000 0.0000     2132.
                        27 0.0000 0.0000     1427.
                        28 0.0000 0.0000      926.
                        29 0.0000 0.0000      602.
                        30 0.0000 0.0000      385.
                        31 0.0000 0.0000      243.
                        32 0.0000 0.0000      142.
                        33 0.0000 0.0000       87.
                        34 0.0000 0.0000       51.
                        35 0.0000 0.0000       29.
                        36 0.0000 0.0000       15.
                        37 0.0000 0.0000        6.
                        38 0.0000 0.0000        0.
                        39 0.0000 0.0000        0.
                        40 0.0000 0.0000        0.
                        41 0.0000 0.0000        0.
                        42 0.0000 0.0000        0.
                        43 0.0000 0.0000        0.
                        44 0.0000 0.0000        0.
                        45 0.0000 0.0000        0.
                        46 0.0000 0.0000        0.
                        47 0.0000 0.0000        0.
                        48 0.0000 0.0000        0.
                        49 0.0000 0.0000        0.
                        50 0.0000 0.0000        0.

                       SUM  10.22   7.10    78412.

                    PEAK    6-HOUR  24-HOUR   72-HOUR   TOTAL VOLUME
       CFS         5907.     5093.    3145.     1568.         78412.
    INCHES                    2.74     6.76      7.03           7.03
     AC-FT                   2527.    6242.     6484.          6484.
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 *OVF*
                                                 STATION      1

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
                                                                                                        PRECIP(L) AND EXCESS(X)
       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
        1 I         .         .         .         .         .         .         .         .         .         .         .     LLLXX
        2 . I       .         .         .         .         .         .         .         .         .         .         .   LLLXXXX
        3 .   I     .         .         .         .         .         .         .         .         .         .         .    LLLXXX
        4 .      I  .         .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
        5 .         .  I      .         .         .         .         .         .         .         .         .        LLLXXXXXXXXX
        6 .         .       I .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
        7 .         .         . I       .         .         .         .         .         .         .         .         . LLLXXXXXX
        8 .         .         .  I      .         .         .         .         .         .         .         .         LLLLXXXXXXX
        9 .         .         .    I    .         .         .         .         .         .         .         .         LLLLXXXXXXX
       10 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
       11 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
       12 .         .         .     I   .         .         .         .         .         .         .         .         LLLLXXXXXXX
       13 .         .         .      I  .         .         .         .         .         .         .         .         LLLXXXXXXXX
       14 .         .         .        I.         .         .         .         .         .         .    LLLXXXXXXXXXXXXX
       15 .         .         .         .  I      .         .         .         .         .         .        LLLLXXXXXXXX
       16 .         .         .         .      I  .         .         .         .         .         .   LLLXXXXXXXXXXXXXX
       17 .         .         .         .         .I        .         .         .         .         .   LLLLXXXXXXXXXXXXX
       18 .         .         .         .         .         I         .         .         .         .LLLXXXXXXXXXXXXXXXXXXXXXXXXXXX
       19 .         .         .         .         .         .        I.         .         .         .       LLLXXXXXXXXXX
       20 .         .         .         .         .         .        I.         .         .         .        LLLXXXXXXXXX
       21 .         .         .         .         .         . I       .         .         .         .         .         LLLLXXXXXXX
       22 .         .         .         .         .    I    .         .         .         .         .         .         .LLLXXXXXXX
       23 .         .         .         .       I .         .         .         .         .         .         .         .LLLXXXXXXX
       24 .         .         .         .   I     .         .         .         .         .         .         .         . LLLXXXXXX
       25 .         .         .        I.         .         .         .         .         .         .         .         .         L
       26 .         .         .I        .         .         .         .         .         .         .         .         .         L
       27 .         .   I     .         .         .         .         .         .         .         .         .         .         L
       28 .        I.         .         .         .         .         .         .         .         .         .         .         L
       29 .     I   .         .         .         .         .         .         .         .         .         .         .         L
       30 .   I     .         .         .         .         .         .         .         .         .         .         .         L
       31 . I       .         .         .         .         .         .         .         .         .         .         .         L
       32 .I        .         .         .         .         .         .         .         .         .         .         .         L
       33 .I        .         .         .         .         .         .         .         .         .         .         .         L
       34 .I        .         .         .         .         .         .         .         .         .         .         .         L
       35 I         .         .         .         .         .         .         .         .         .         .         .         L
       36 I         .         .         .         .         .         .         .         .         .         .         .         L
       37 I         .         .         .         .         .         .         .         .         .         .         .         L
       38 I         .         .         .         .         .         .         .         .         .         .         .         L
       39 I         .         .         .         .         .         .         .         .         .         .         .         L
       40 I         .         .         .         .         .         .         .         .         .         .         .         L
       41 I         .         .         .         .         .         .         .         .         .         .         .         L
       42 I         .         .         .         .         .         .         .         .         .         .         .         L
       43 I         .         .         .         .         .         .         .         .         .         .         .         L
       44 I         .         .         .         .         .         .         .         .         .         .         .         L
       45 I         .         .         .         .         .         .         .         .         .         .         .         L
       46 I         .         .         .         .         .         .         .         .         .         .         .         L
       47 I         .         .         .         .         .         .         .         .         .         .         .         L
       48 I         .         .         .         .         .         .         .         .         .         .         .         L
       49 I         .         .         .         .         .         .         .         .         .         .         .         L
       50 I         .         .         .         .         .         .         .         .         .         .         .         L
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      *OVN*



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                                                        HYDROGRAPH BALANCE

                         BALANCED HYDROGRAPH INFLOW TO  RESERVOIR    AREA A

                                        ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                            1      88       0       0       0       0       1

                  BALANCE DESIRED      1     7563.     24    66752.      0        0.      0        0.     0        0.
               BALANCE RESULTS             7563.             66752.              0.               0.               0.

      NUMBER OF ITERATIONS=  4

                                                   END-OF-PERIOD FLOWS AT      1
                                                          SUM=    69331.
                      19.      156.      370.      655.     1065.     1554.     1849.     1975.     2091.     2187.
                    2206.     2211.     2271.     2497.     2826.     3120.     3497.     4241.     7563.     5025.
                    4418.     3789.     3261.     2863.     2427.     1814.     1214.      788.      532.      340.
                     215.      125.       77.       45.       25.       13.        5.        0.        0.        0.
                       0.        0.        0.        0.        0.        0.        0.        0.        0.        0.

                                              PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                      CFS    7563.     4755.     2781.     1387.         69331.
                                   INCHES               2.56      5.98      6.21           6.21
                                    AC-FT              2359.     5520.     5733.          5733.
```

```
*OVF*
                                           STATION      1

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 . I       .         .         .         .         .         .         .         .         .         .         .         .
  3 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  4 .      I  .         .         .         .         .         .         .         .         .         .         .         .
  5 .         .I        .         .         .         .         .         .         .         .         .         .         .
  6 .         .     I   .         .         .         .         .         .         .         .         .         .         .
  7 .         .       I .         .         .         .         .         .         .         .         .         .         .
  8 .         .         I         .         .         .         .         .         .         .         .         .         .
  9 .         .         .I        .         .         .         .         .         .         .         .         .         .
 10 .         .         . I       .         .         .         .         .         .         .         .         .         .
 11 .         .         . I       .         .         .         .         .         .         .         .         .         .
 12 .         .         . I       .         .         .         .         .         .         .         .         .         .
 13 .         .         .  I      .         .         .         .         .         .         .         .         .         .
 14 .         .         .    I    .         .         .         .         .         .         .         .         .         .
 15 .         .         .       I .         .         .         .         .         .         .         .         .         .
 16 .         .         .         .I        .         .         .         .         .         .         .         .         .
 17 .         .         .         .    I    .         .         .         .         .         .         .         .         .
 18 .         .         .         .         . I       .         .         .         .         .         .         .         .
 19 .         .         .         .         .         .         .         .     I   .         .         .         .         .
 20 .         .         .         .         .         I         .         .         .         .         .         .         .
 21 .         .         .         .         .   I     .         .         .         .         .         .         .         .
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                                                  HYDROGRAPH ROUTING

                 ROUTE FLOW  THRU RESERVOIR   POINT 1

                                   ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                       1       1       0       0       0       0       1
                                                     ROUTING DATA
                                           QLOSS   CLOSS     AVG    IRES   ISAME
                                             0.0   0.000    0.00       1       0

                                   NSTPS   NSTOL     LAG   AMSKK       X     TSK   STORA
                                       0       0       0   0.000   0.000   0.000      0.

    STORAGE=        0.      3804.      3899.      3995.      4092.      4191.      4292.      4394.      4498.      4604.
    OUTFLOW=        0.       100.       557.      1408.      2529.      3880.      5438.      7192.      9127.     11243.

                                        TIME  EOP STOR    AVG IN   EOP OUT
                                           1        2.       19.        0.
                                           2        9.       87.        0.
                                           3       30.      263.        1.
                                           4       73.      513.        2.
                                           5      144.      860.        4.
                                           6      251.     1310.        7.
                                           7      391.     1702.       10.
                                           8      548.     1912.       14.
                                           9      715.     2033.       19.
                                          10      890.     2139.       23.
                                          11     1069.     2196.       28.
                                          12     1249.     2209.       33.
                                          13     1432.     2241.       38.
                                          14     1625.     2384.       43.
                                          15     1842.     2662.       48.
                                          16     2083.     2973.       55.
                                          17     2352.     3309.       62.
                                          18     2666.     3869.       70.
                                          19     3147.     5902.       83.
                                          20     3660.     6294.       96.
                                          21     3990.     4721.     1364.
                                          22     4141.     4103.     3195.
                                          23     4158.     3525.     3433.
                                          24     4139.     3062.     3166.
                                          25     4111.     2645.     2790.
                                          26     4075.     2120.     2330.
                                          27     4029.     1514.     1802.
                                          28     3983.     1001.     1305.
                                          29     3944.      660.      959.
                                          30     3913.      436.      679.
                                          31     3887.      279.      499.
                                          32     3866.      170.      390.
                                          33     3844.      101.      294.
                                          34     3828.       61.      217.
                                          35     3816.       35.      157.
                                          36     3806.       19.      111.
                                          37     3798.        9.      100.
                                          38     3790.        3.      100.
                 39     3782.        0.       99.
                 40     3774.        0.       99.
                 41     3766.        0.       99.
                 42     3758.        0.       99.
                 43     3749.        0.       99.
                 44     3741.        0.       98.
                 45     3733.        0.       98.
                 46     3725.        0.       98.
                 47     3717.        0.       98.
                 48     3709.        0.       97.
                 49     3701.        0.       97.
                 50     3693.        0.       97.

                SUM                        24706.

              PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
      CFS    3433.     2786.      979.      494.         24706.
   INCHES               1.50      2.10      2.21           2.21
    AC-FT              1382.     1942.     2043.          2043.
```

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     *OVF*
                                                      STATION     1

                                 INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
            0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
            1 I         .         .         .         .         .         .         .         .         .         .         .         .
            2 OI        .         .         .         .         .         .         .         .         .         .         .         .
            3 O  I      .         .         .         .         .         .         .         .         .         .         .         .
            4 O    I    .         .         .         .         .         .         .         .         .         .         .         .
            5 O        I.         .         .         .         .         .         .         .         .         .         .         .
            6 O         .  I      .         .         .         .         .         .         .         .         .         .         .
            7 O         .      I  .         .         .         .         .         .         .         .         .         .         .
            8 O         .        I.         .         .         .         .         .         .         .         .         .         .
            9 O         .         I         .         .         .         .         .         .         .         .         .         .
           10 O         .         .I        .         .         .         .         .         .         .         .         .         .
           11 O         .         . I       .         .         .         .         .         .         .         .         .         .
           12 O         .         . I       .         .         .         .         .         .         .         .         .         .
           13 O         .         . I       .         .         .         .         .         .         .         .         .         .
           14 O         .         .   I     .         .         .         .         .         .         .         .         .         .
           15 O         .         .      I  .         .         .         .         .         .         .         .         .         .
           16 .O        .         .         I         .         .         .         .         .         .         .         .         .
           17 .O        .         .         .  I      .         .         .         .         .         .         .         .         .
           18 .O        .         .         .        I.         .         .         .         .         .         .         .         .
           19 .O        .         .         .         .         .        I.         .         .         .         .         .         .
           20 .O        .         .         .         .         .         .  I      .         .         .         .         .         .
           21 .         .   O     .         .         .      I  .         .         .         .         .         .         .         .
           22 .         .         .         . O       . I       .         .         .         .         .         .         .         .
           23 .         .         .         .   OI    .         .         .         .         .         .         .         .         .
           24 .         .         .         .IO       .         .         .         .         .         .         .         .         .
           25 .         .         .     I O .         .         .         .         .         .         .         .         .         .
           26 .         .         .I O      .         .         .         .         .         .         .         .         .         .
           27 .         .    I  O .         .         .         .         .         .         .         .         .         .         .
           28 .         I  O      .         .         .         .         .         .         .         .         .         .         .
           29 .      I  O         .         .         .         .         .         .         .         .         .         .         .
           30 .   I  O  .         .         .         .         .         .         .         .         .         .         .         .
           31 .  I O    .         .         .         .         .         .         .         .         .         .         .         .
           32 . I O     .         .         .         .         .         .         .         .         .         .         .         .
           33 .I O      .         .         .         .         .         .         .         .         .         .         .         .
           34 .IO       .         .         .         .         .         .         .         .         .         .         .         .
           35 I O       .         .         .         .         .         .         .         .         .         .         .         .
           36 IO        .         .         .         .         .         .         .         .         .         .         .         .
           37 IO        .         .         .         .         .         .         .         .         .         .         .         .
           38 IO        .         .         .         .         .         .         .         .         .         .         .         .
           39 IO        .         .         .         .         .         .         .         .         .         .         .         .
           40 IO        .         .         .         .         .         .         .         .         .         .         .         .
           41 IO        .         .         .         .         .         .         .         .         .         .         .         .
           42 IO        .         .         .         .         .         .         .         .         .         .         .         .
           43 IO        .         .         .         .         .         .         .         .         .         .         .         .
           44 IO        .         .         .         .         .         .         .         .         .         .         .         .
           45 IO        .         .         .         .         .         .         .         .         .         .         .         .
           46 IO        .         .         .         .         .         .         .         .         .         .         .         .
           47 IO        .         .         .         .         .         .         .         .         .         .         .         .
           48 IO        .         .         .         .         .         .         .         .         .         .         .         .
           49 IO        .         .         .         .         .         .         .         .         .         .         .         .
           50 IO        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*



          **********          **********          **********          **********          **********

                                              HYDROGRAPH ROUTING

                  ROUTE  STEVENS CREEK RESERVOIR OUTFLOW  DOWN TO  RTE 280    POINT 2

                             ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                 2        1        0        0        0        0        1
                                                 ROUTING DATA
                                      QLOSS    CLOSS      AVG     IRES    ISAME
                                        0.0    0.000     0.00        1        0

                             NSTPS    NSTDL      LAG    AMSKK        X      TSK    STORA
                                 0        0        0    0.000    0.000    0.000       0.

   STORAGE=         0.        50.       100.       150.       250.       380.         0.         0.         0.         0.
   OUTFLOW=         0.       500.      1500.      2500.      6500.     13000.         0.         0.         0.         0.

                                   TIME  EOP STOR    AVG IN   EOP OUT
                                      1        0.        0.        0.
                                      2        0.        0.        0.
                                      3        0.        1.        0.
                                      4        0.        1.        1.
                                      5        0.        3.        2.
                                      6        0.        5.        4.
                                      7        1.        8.        7.
                                      8        1.       12.       10.
                                      9        1.       17.       14.
                                     10        2.       21.       18.
                                     11        2.       26.       23.
                                     12        3.       30.       27.
                                     13        3.       35.       32.
                                     14        4.       40.       37.
                                     15        4.       46.       42.
                                     16        5.       52.       48.
                                     17        5.       58.       54.
                                     18        6.       66.       61.
                                     19        7.       76.       70.
                                     20        8.       89.       81.
                                     21       46.      730.      461.
                                     22      129.     2279.     2085.
                                     23      174.     3314.     3460.
                                     24      169.     3299.     3260.
                                     25      160.     2978.     2909.
                                     26      149.     2560.     2481.
                                     27      130.     2066.     2106.
                                     28      105.     1554.     1606.
                                     29       84.     1132.     1177.
                                     30       68.      819.      853.
                                     31       56.      589.      614.
                                     32       47.      445.      475.
                                     33       40.      342.      397.
                                     34       31.      256.      314.
                                     35       24.      187.      240.
                                     36       18.      134.      178.
                                     37       14.      105.      136.
                                     38       11.      100.      115.
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                          39         11.       100.       106.
                          40         10.        99.       102.
                          41         10.        99.       100.
                          42         10.        99.        99.
                          43         10.        99.        99.
                          44         10.        98.        99.
                          45         10.        98.        98.
                          46         10.        98.        98.
                          47         10.        98.        98.
                          48         10.        98.        98.
                          49         10.        97.        98.
                          50         10.        97.        97.

                         SUM                            24588.

                     PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
            CFS     3460.     2717.       978.       492.          24588.
         INCHES                1.46       2.10       2.20            2.20
          AC-FT               1348.      1941.      2033.           2033.
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*OVF*
                                          STATION     2

                      INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
 0.      400.      800.     1200.     1600.     2000.     2400.     2800.     3200.     3600.        0.        0.        0.
 1 I         .         .         .         .         .         .         .         .         .         .         .         .
 2 I         .         .         .         .         .         .         .         .         .         .         .         .
 3 I         .         .         .         .         .         .         .         .         .         .         .         .
 4 I         .         .         .         .         .         .         .         .         .         .         .         .
 5 I         .         .         .         .         .         .         .         .         .         .         .         .
 6 I         .         .         .         .         .         .         .         .         .         .         .         .
 7 I         .         .         .         .         .         .         .         .         .         .         .         .
 8 I         .         .         .         .         .         .         .         .         .         .         .         .
 9 I         .         .         .         .         .         .         .         .         .         .         .         .
10 OI        .         .         .         .         .         .         .         .         .         .         .         .
11 .I        .         .         .         .         .         .         .         .         .         .         .         .
12 .I        .         .         .         .         .         .         .         .         .         .         .         .
13 .I        .         .         .         .         .         .         .         .         .         .         .         .
14 .I        .         .         .         .         .         .         .         .         .         .         .         .
15 .I        .         .         .         .         .         .         .         .         .         .         .         .
16 .I        .         .         .         .         .         .         .         .         .         .         .         .
17 .I        .         .         .         .         .         .         .         .         .         .         .         .
18 . I       .         .         .         .         .         .         .         .         .         .         .         .
19 . I       .         .         .         .         .         .         .         .         .         .         .         .
20 . I       .         .         .         .         .         .         .         .         .         .         .         .
21 .         . O     I .         .         .         .         .         .         .         .         .         .         .
22 .         .         .         .         .         . O    I  .         .         .         .         .         .         .
23 .         .         .         .         .         .         .         .         .  I  O   .         .         .         .
24 .         .         .         .         .         .         .         .         .OI       .         .         .         .
25 .         .         .         .         .         .         .         .  OI     .         .         .         .         .
26 .         .         .         .         .         .         . O I     .         .         .         .         .         .
27 .         .         .         .         .         . IO      .         .         .         .         .         .         .
28 .         .         .         .        IO         .         .         .         .         .         .         .         .
29 .         .         .       IO.         .         .         .         .         .         .         .         .         .
30 .         .         IO        .         .         .         .         .         .         .         .         .         .
31 .         .    I    .         .         .         .         .         .         .         .         .         .         .
32 .         .IO       .         .         .         .         .         .         .         .         .         .         .
33 .        IO         .         .         .         .         .         .         .         .         .         .         .
34 .     I O .         .         .         .         .         .         .         .         .         .         .         .
35 .    IO   .         .         .         .         .         .         .         .         .         .         .         .
36 .  IO     .         .         .         .         .         .         .         .         .         .         .         .
37 .  I      .         .         .         .         .         .         .         .         .         .         .         .
38 . IO      .         .         .         .         .         .         .         .         .         .         .         .
39 . IO      .         .         .         .         .         .         .         .         .         .         .         .
40 . IO      .         .         .         .         .         .         .         .         .         .         .         .
41 . IO      .         .         .         .         .         .         .         .         .         .         .         .
42 . I       .         .         .         .         .         .         .         .         .         .         .         .
43 . I       .         .         .         .         .         .         .         .         .         .         .         .
44 . I       .         .         .         .         .         .         .         .         .         .         .         .
45 . I       .         .         .         .         .         .         .         .         .         .         .         .
46 . I       .         .         .         .         .         .         .         .         .         .         .         .
47 . I       .         .         .         .         .         .         .         .         .         .         .         .
48 . I       .         .         .         .         .         .         .         .         .         .         .         .
49 . I       .         .         .         .         .         .         .         .         .         .         .         .
50 . I       .         .         .         .         .         .         .         .         .         .         .         .
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*DVN*

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                              SUB-AREA RUNOFF COMPUTATION

     RUNOFF HYDROGRAPH LOCAL INFLOW  AT RTE 280  (AREA B)   POINT 2

                    ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                        2       0       0       0       0       0       1

                                  HYDROGRAPH DATA
        IHYDG    IUHG   TAREA    SNAP   TRSDA   TRSPC   RATIO   ISNOW   ISAME   LOCAL
            0       0    3.60    0.00    0.00    0.00   0.000       0       0       0

                                    PRECIP DATA
                           NP   STORM      DAJ      DAK
                           24    7.01     0.00     0.00
                                  PRECIP PATTERN
 1.61      2.42      2.10      3.39      4.19      3.71      3.23      3.71      3.87      3.39
 3.39      3.71      3.87      5.64      4.19      6.61      6.29     11.77      4.67      4.36
 3.71      3.39      3.55      3.23

                                     LOSS DATA
      STRKR   DLTKR   RTIOL   ERAIN   STRKS   RTIOK   STRTL   CNSTL   ALSMX   RTIMP
      0.000   0.000   1.000   0.000   0.000   1.000   0.000   0.090   0.000   0.150

                                UNIT HYDROGRAPH DATA
                        TC=  1.50     R=  1.20     NTA=  0

                                  RECESSION DATA
                   STRTQ=     0.00     QRCSN=     0.00    RTIOR= 1.00

     UNIT HYDROGRAPH  7 END-OF-PERIOD ORDINATES, LAG=   1.38 HOURS, CP= 0.60  VOL= 1.00
 497.      888.      551.      227.       93.       38.       16.

                               END-OF-PERIOD FLOW
                          TIME   RAIN   EXCS     COMP Q
                             1 0.1129 0.0364        16.
                             2 0.1696 0.0931        79.
                             3 0.1472 0.0707       138.
                             4 0.2376 0.1611       202.
                             5 0.2937 0.2172       315.
                             6 0.2601 0.1836       399.
                             7 0.2264 0.1499       405.
                             8 0.2601 0.1836       394.
                             9 0.2713 0.1948       412.
                            10 0.2376 0.1611       416.
                            11 0.2376 0.1611       397.
                            12 0.2601 0.1836       393.
                            13 0.2713 0.1948       413.
                            14 0.3954 0.3189       495.
                            15 0.2937 0.2172       564.
                            16 0.4634 0.3869       631.
                            17 0.4409 0.3644       745.
                            18 0.8251 0.7486       998.
                            19 0.3274 0.2509      1114.
                            20 0.3056 0.2291       882.
                            21 0.2601 0.1836       655.
                   22 0.2376 0.1611         516.
                   23 0.2489 0.1724         440.
                   24 0.2264 0.1499         401.
                   25 0.0000 0.0000         295.
                   26 0.0000 0.0000         148.
                   27 0.0000 0.0000          59.
                   28 0.0000 0.0000          23.
                   29 0.0000 0.0000           9.
                   30 0.0000 0.0000           2.
                   31 0.0000 0.0000           0.
                   32 0.0000 0.0000           0.
                   33 0.0000 0.0000           0.
                   34 0.0000 0.0000           0.
                   35 0.0000 0.0000           0.
                   36 0.0000 0.0000           0.
                   37 0.0000 0.0000           0.
                   38 0.0000 0.0000           0.
                   39 0.0000 0.0000           0.
                   40 0.0000 0.0000           0.
                   41 0.0000 0.0000           0.
                   42 0.0000 0.0000           0.
                   43 0.0000 0.0000           0.
                   44 0.0000 0.0000           0.
                   45 0.0000 0.0000           0.
                   46 0.0000 0.0000           0.
                   47 0.0000 0.0000           0.
                   48 0.0000 0.0000           0.
                   49 0.0000 0.0000           0.
                   50 0.0000 0.0000           0.

                  SUM   7.03   5.15      11958.

             PEAK     6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
     CFS    1114.       837.      490.      239.         11957.
  INCHES                2.16      5.07      5.15           5.15
   AC-FT                415.      973.      989.           989.
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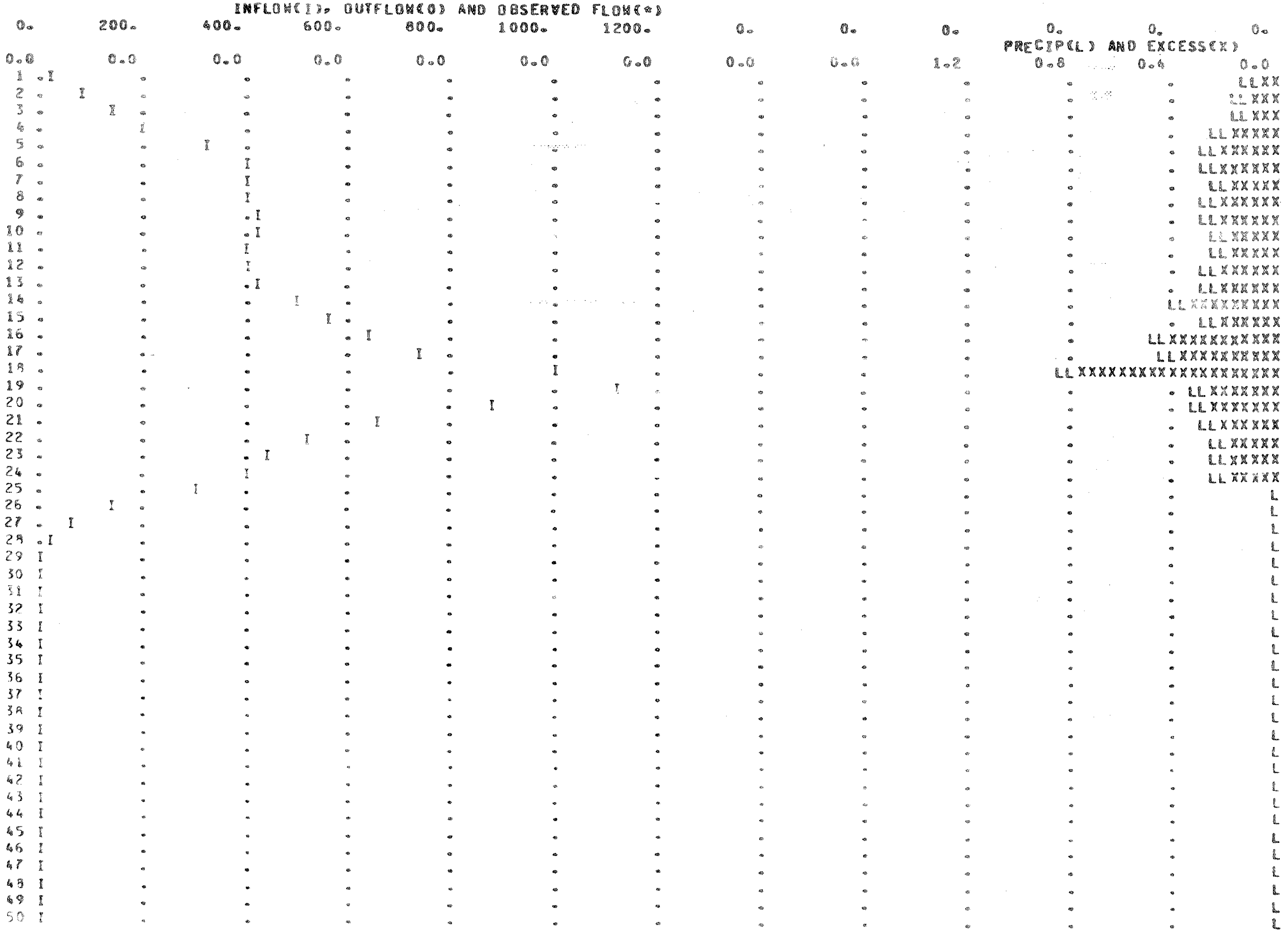
OVF

STATION 2



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          **********          **********          **********          **********          **********

                                                    HYDROGRAPH BALANCE

                BALANCED HYDROGRAPH LOCAL INFLOW   AT  RTE 280  (AREA B)  POINT 2

                                       ISTAQ    ICOMP    IECON    ITAPE    JPLT    JPRT    INAME
                                           2       88        0        0       0       0        1

          BALANCE DESIRED       1     1093.      24     8471.       0       0.       0       0.       0       0.
        BALANCE RESULTS             1093.            8471.                0.               0.               0.

NUMBER OF ITERATIONS=  4

                                                END-OF-PERIOD FLOWS AT      2
                                                      SUM-      8603.
              9.        57.        95.       140.       218.       276.       280.       273.       285.       288.
            275.       272.       284.       343.       391.       437.       516.       691.      1093.       611.
            454.       358.       305.       278.       204.       102.        43.        17.         6.         2.
              0.         0.         0.         0.         0.         0.         0.         0.         0.         0.
              0.         0.         0.         0.         0.         0.         0.         0.         0.         0.

                                           PEAK    6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
                                 CFS      1093.      634.       353.       172.          8603.
                              INCHES                 1.64       3.65       3.71           3.71
                               AC-FT                 314.       700.       711.           711.
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       *OVF*
                                                        STATION     2

                                   INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
              0.      100.      200.      300.      400.      500.      600.      700.      800.      900.     1000.     1100.        0.
              1 .I        .         .         .         .         .         .         .         .         .         .         .         .
              2 .     I   .         .         .         .         .         .         .         .         .         .         .         .
              3 .         I         .         .         .         .         .         .         .         .         .         .         .
              4 .         .   I     .         .         .         .         .         .         .         .         .         .         .
              5 .         .         . I       .         .         .         .         .         .         .         .         .         .
              6 .         .         .       I .         .         .         .         .         .         .         .         .         .
              7 .         .         .       I .         .         .         .         .         .         .         .         .         .
              8 .         .         .      I  .         .         .         .         .         .         .         .         .         .
              9 .         .         .        I.         .         .         .         .         .         .         .         .         .
             10 .         .         .        I.         .         .         .         .         .         .         .         .         .
             11 .         .         .      I  .         .         .         .         .         .         .         .         .         .
             12 .         .         .      I  .         .         .         .         .         .         .         .         .         .
             13 .         .         .        I.         .         .         .         .         .         .         .         .         .
             14 .         .         .         .   I     .         .         .         .         .         .         .         .         .
             15 .         .         .         .        I.         .         .         .         .         .         .         .         .
             16 .         .         .         .         .   I     .         .         .         .         .         .         .         .
             17 .         .         .         .         .         . I       .         .         .         .         .         .         .
             18 .         .         .         .         .         .         .        I.         .         .         .         .         .
             19 .         .         .         .         .         .         .         .         .         .         .        I.         .
             20 .         .         .         .         .         .         .I        .         .         .         .         .         .
             21 .         .         .         .         .    I    .         .         .         .         .         .         .         .
             22 .         .         .         .     I   .         .         .         .         .         .         .         .         .
             23 .         .         .         I         .         .         .         .         .         .         .         .         .
             24 .         .         .       I .         .         .         .         .         .         .         .         .         .
             25 .         .         I         .         .         .         .         .         .         .         .         .         .
             26 .         I         .         .         .         .         .         .         .         .         .         .         .
             27 .   I     .         .         .         .         .         .         .         .         .         .         .         .
             28 . I       .         .         .         .         .         .         .         .         .         .         .         .
             29 .I        .         .         .         .         .         .         .         .         .         .         .         .
             30 I         .         .         .         .         .         .         .         .         .         .         .         .
             31 I         .         .         .         .         .         .         .         .         .         .         .         .
             32 I         .         .         .         .         .         .         .         .         .         .         .         .
             33 I         .         .         .         .         .         .         .         .         .         .         .         .
             34 I         .         .         .         .         .         .         .         .         .         .         .         .
             35 I         .         .         .         .         .         .         .         .         .         .         .         .
             36 I         .         .         .         .         .         .         .         .         .         .         .         .
             37 I         .         .         .         .         .         .         .         .         .         .         .         .
             38 I         .         .         .         .         .         .         .         .         .         .         .         .
             39 I         .         .         .         .         .         .         .         .         .         .         .         .
             40 I         .         .         .         .         .         .         .         .         .         .         .         .
             41 I         .         .         .         .         .         .         .         .         .         .         .         .
             42 I         .         .         .         .         .         .         .         .         .         .         .         .
             43 I         .         .         .         .         .         .         .         .         .         .         .         .
             44 I         .         .         .         .         .         .         .         .         .         .         .         .
             45 I         .         .         .         .         .         .         .         .         .         .         .         .
             46 I         .         .         .         .         .         .         .         .         .         .         .         .
             47 I         .         .         .         .         .         .         .         .         .         .         .         .
             48 I         .         .         .         .         .         .         .         .         .         .         .         .
             49 I         .         .         .         .         .         .         .         .         .         .         .         .
             50 I         .         .         .         .         .         .         .         .         .         .         .         .
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          *********          *********          *********          *********          *********

                                          COMBINE HYDROGRAPHS

                  COMBINE LOCAL INFLOW (AREA B) WITH FLOW ROUTED FROM  RESERVOIR   AT POINT 2

                                  ISTAQ    ICOMP    IECON    ITAPE    JPLT     JPRT    INAME
                                      2        2        0        0        0        0        1

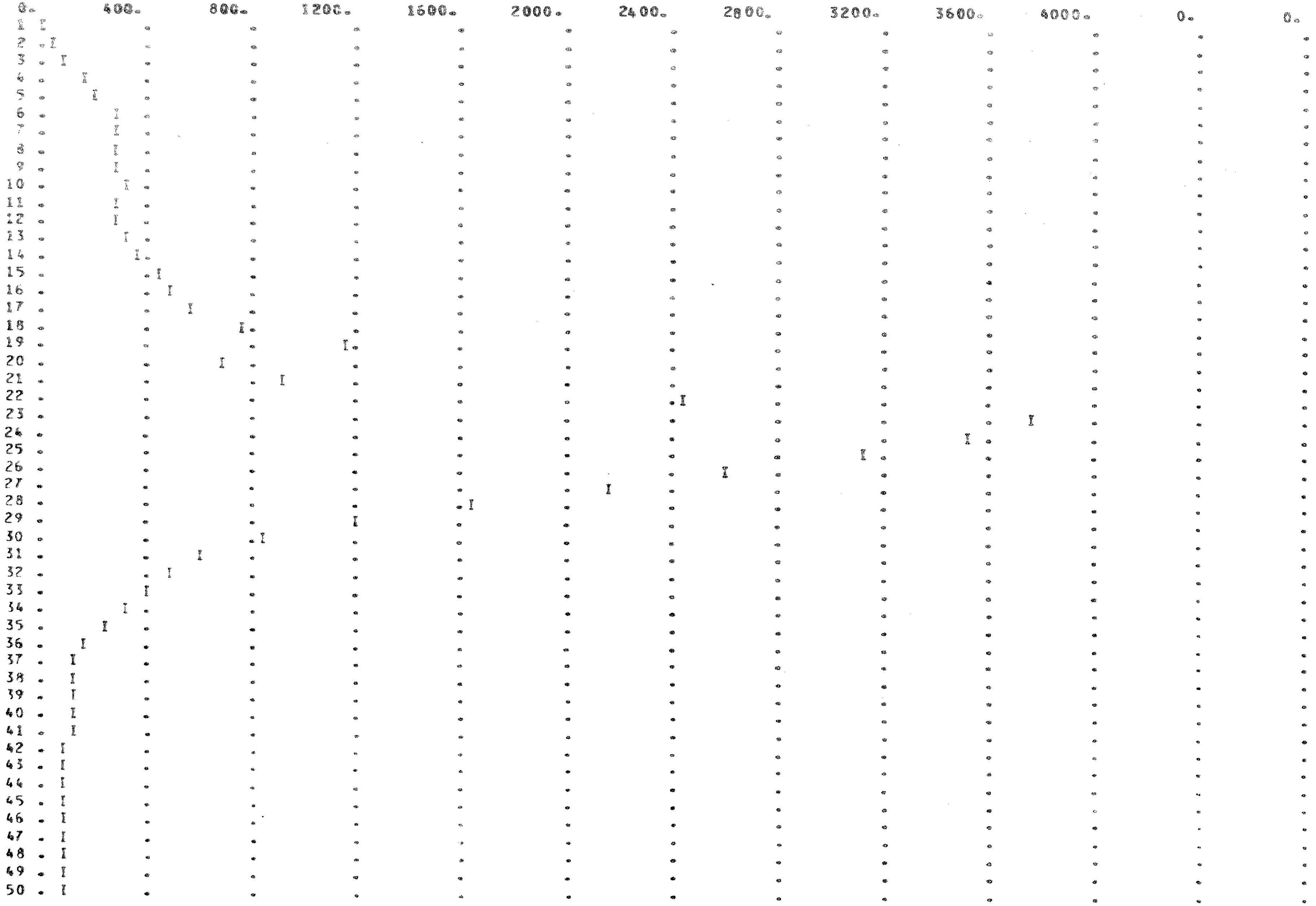

                                      SUM OF 2 HYDROGRAPHS AT      2
            9.        57.        96.       141.       220.       280.       287.       283.       299.       306.
          297.       300.       318.       379.       433.       485.       569.       752.      1163.       692.
          915.      2443.      3764.      3538.      3113.      2584.      2166.      1623.      1183.       855.
          614.       475.       397.       314.       240.       178.       136.       115.       106.       102.
          100.        99.        99.        99.        98.        98.        98.        98.        98.        97.

                                    PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
                            CFS    3764.     2932.      1223.       664.          33192.
                         INCHES               1.30       2.18       2.46            2.46
                          AC-FT              1454.      2427.      2745.           2745.
```

OVF

STATION 2

INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)



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*OVN*

          **********          **********          **********          **********          **********
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                              RUNOFF SUMMARY, AVERAGE FLOW

                                   PEAK     6-HOUR    24-HOUR    72-HOUR       AREA
HYDROGRAPH AT           1         7563.      4755.      2781.      1387.      17.30
ROUTED TO               1         3633.      2786.       979.       496.      17.30
ROUTED TO               2         3460.      2717.       978.       492.      17.30
HYDROGRAPH AT           2         1093.       634.       353.       172.       3.60
ROUTED TO               2         1093.       634.       353.       172.       3.60
 2 COMBINED             2         3764.      2932.      1223.       664.      20.90
```

2 - a

```
 ******************************
 HEC-1 VERSION DATED JAN 1973
 UPDATED AUG 74
 CHANGE NO. 01
 ******************************
                STEVENS CREEK  HYDROLOGY   100 YEAR  FLOOD HYDROGRAPHS     RESERVOIR    FULL    3804  AF
```

(adjusted inflow volume)

```
                                          JOB SPECIFICATION
                               NQ    NHR   NMIN  IDAY   IHR  IMIN METRC  IPLT  IPRT NSTAN
                               50      1      0     0     0     0     0     2     0     0
                                            JOPER      NWT
                                                3        0


          **********          **********          **********          **********          **********

                                     SUB-AREA RUNOFF COMPUTATION

             RUNOFF HYDROGRAPH  INFLOW TO RESERVOIR   (AREA A)     POINT 1

                              ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                  1       0       0       0       0       0       1

                                           HYDROGRAPH DATA
              IHYDG     IUHG   TAREA    SNAP   TRSDA   TRSPC   RATIO   ISNOW   ISAME   LOCAL
                  0        0   17.30    0.00    0.00    0.00   0.000       0       0       0

                                           PRECIP DATA
                                      NP   STORM     DAJ     DAK
                                      24   10.18    0.00    0.00
                                          PRECIP PATTERN
       1.66      2.32      2.15      3.49      4.32      3.66      3.32      3.82      3.82      3.49
       3.49      3.82      3.98      5.82      4.16      6.32      6.15     10.96      4.65      4.47
       3.82      3.49      3.49      3.32

                                            LOSS DATA
             STRKR   DLTKR   RTIOL   ERAIN   STRKS   RTIOK   STRTL   CNSTL   ALSMX   RTIMP
             0.000   0.000   1.000   0.000   0.000   1.000   0.000   0.130   0.000   0.000

                                        UNIT HYDROGRAPH DATA
                                    TC=  2.30    R=  2.40    NTA=  6

                                    UNIT GRAPH TIME-AREA ORDINATES
       0.15      3.13      6.7[illegible]      10.55     15.00     17.30

                                          RECESSION DATA
                             STRTQ=    0.00    QRCSN=    0.00    RTIOR= 1.00

          UNIT HYDROGRAPH 14 END-OF-PERIOD ORDINATES, LAG=   2.06 HOURS, CP= 0.52  VOL= 1.00
       920.     2294.     2607.     1373.     1228.      805.      527.      345.      226.      148.
        97.       64.       42.       27.

                                          END-OF-PERIOD FLOW
                                     TIME   RAIN   EXCS    COMP Q
                                       1 0.1690 0.0330       32.
                                       2 0.2362 0.1062      176.
                                       3 0.[illegible] 0.[illegible]      419.
```

```
                        4 0.3553 0.2253        741.
                        5 0.4398 0.3098       1252.
                        6 0.3726 0.2426       1827.
                        7 0.3380 0.2080       2173.
                        8 0.3889 0.2589       2321.
                        9 0.3889 0.2589       2458.
                       10 0.3553 0.2253       2570.
                       11 0.3553 0.2253       2594.
                       12 0.3889 0.2589       2599.
                       13 0.4052 0.2752       2670.
                       14 0.5925 0.4625       2935.
                       15 0.4235 0.2935       3322.
                       16 0.6434 0.5134       3668.
                       17 0.6261 0.4961       4111.
                       18 1.1157 0.9857       4985.
                       19 0.4734 0.3434       5907.
                       20 0.4550 0.3250       5907.
                       21 0.3889 0.2589       5193.
                       22 0.3553 0.2253       4454.
                       23 0.3553 0.2253       3834.
                       24 0.3380 0.2080       3366.
                       25 0.0000 0.0000       2853.
                       26 0.0000 0.0000       2132.
                       27 0.0000 0.0000       1427.
                       28 0.0000 0.0000        926.
                       29 0.0000 0.0000        602.
                       30 0.0000 0.0000        385.
                       31 0.0000 0.0000        243.
                       32 0.0000 0.0000        142.
                       33 0.0000 0.0000         97.
                       34 0.0000 0.0000         51.
                       35 0.0000 0.0000         29.
                       36 0.0000 0.0000         15.
                       37 0.0000 0.0000          6.
                       38 0.0000 0.0000          0.
                       39 0.0000 0.0000          0.
                       40 0.0000 0.0000          0.
                       41 0.0000 0.0000          0.
                       42 0.0000 0.0000          0.
                       43 0.0000 0.0000          0.
                       44 0.0000 0.0000          0.
                       45 0.0000 0.0000          0.
                       46 0.0000 0.0000          0.
                       47 0.0000 0.0000          0.
                       48 0.0000 0.0000          0.
                       49 0.0000 0.0000          0.
                       50 0.0000 0.0000          0.

                      SUM  10.22   7.10      78412.

                PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
        CFS    5907.     5093.      3145.      1568.          78412.
     INCHES               2.74       6.76       7.03            7.03
      AC-FT              2527.      6242.      6484.           6484.
```

```
*OVF*
                                             STATION      1

                         INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
    0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
                                                                                                    PRECIP(L) AND EXCESS(X)
   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
    1 I         .         .         .         .         .         .         .         .         .         .         .     LLLXX
    2 . I       .         .         .         .         .         .         .         .         .         .         .   LLLXXXX
    3 .   I     .         .         .         .         .         .         .         .         .         .         .    LLLXXX
    4 .      I  .         .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
    5 .         .  I      .         .         .         .         .         .         .         .         .        LLLXXXXXXXXX
    6 .         .       I .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
    7 .         .         . I       .         .         .         .         .         .         .         .         . LLLXXXXXX
    8 .         .         .  I      .         .         .         .         .         .         .         .         LLLLXXXXXXX
    9 .         .         .    I    .         .         .         .         .         .         .         .         LLLLXXXXXXX
   10 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
   11 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
   12 .         .         .     I   .         .         .         .         .         .         .         .         LLLLXXXXXXX
   13 .         .         .      I  .         .         .         .         .         .         .         .         LLLXXXXXXXX
   14 .         .         .        I.         .         .         .         .         .         .         .    LLLXXXXXXXXXXXXX
   15 .         .         .         .  I      .         .         .         .         .         .         .        LLLLXXXXXXXX
   16 .         .         .         .      I  .         .         .         .         .         .         .   LLLXXXXXXXXXXXXXX
   17 .         .         .         .         .I        .         .         .         .         .         .   LLLLXXXXXXXXXXXXX
   18 .         .         .         .         .         I         .         .         .         . LLLXXXXXXXXXXXXXXXXXXXXXXXXXX
   19 .         .         .         .         .         .        I.         .         .         .         .       LLLXXXXXXXXXX
   20 .         .         .         .         .         .        I.         .         .         .         .        LLLXXXXXXXXX
   21 .         .         .         .         .         . I       .         .         .         .         .         LLLLXXXXXXX
   22 .         .         .         .         .    I    .         .         .         .         .         .         .LLLXXXXXXX
   23 .         .         .         .       I .         .         .         .         .         .         .         .LLLXXXXXXX
   24 .         .         .         .   I     .         .         .         .         .         .         .         . LLLXXXXXX
   25 .         .         .        I.         .         .         .         .         .         .         .         .         L
   26 .         .         .I        .         .         .         .         .         .         .         .         .         L
   27 .         .   I     .         .         .         .         .         .         .         .         .         .         L
   28 .        I.         .         .         .         .         .         .         .         .         .         .         L
   29 .     I   .         .         .         .         .         .         .         .         .         .         .         L
   30 .   I     .         .         .         .         .         .         .         .         .         .         .         L
   31 . I       .         .         .         .         .         .         .         .         .         .         .         L
   32 .I        .         .         .         .         .         .         .         .         .         .         .         L
   33 .I        .         .         .         .         .         .         .         .         .         .         .         L
   34 .I        .         .         .         .         .         .         .         .         .         .         .         L
   35 I         .         .         .         .         .         .         .         .         .         .         .         L
   36 I         .         .         .         .         .         .         .         .         .         .         .         L
   37 I         .         .         .         .         .         .         .         .         .         .         .         L
   38 I         .         .         .         .         .         .         .         .         .         .         .         L
   39 I         .         .         .         .         .         .         .         .         .         .         .         L
   40 I         .         .         .         .         .         .         .         .         .         .         .         L
   41 I         .         .         .         .         .         .         .         .         .         .         .         L
   42 I         .         .         .         .         .         .         .         .         .         .         .         L
   43 I         .         .         .         .         .         .         .         .         .         .         .         L
   44 I         .         .         .         .         .         .         .         .         .         .         .         L
   45 I         .         .         .         .         .         .         .         .         .         .         .         L
   46 I         .         .         .         .         .         .         .         .         .         .         .         L
   47 I         .         .         .         .         .         .         .         .         .         .         .         L
   48 I         .         .         .         .         .         .         .         .         .         .         .         L
   49 I         .         .         .         .         .         .         .         .         .         .         .         L
   50 I         .         .         .         .         .         .         .         .         .         .         .         L
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*DVN*

          **********          **********          **********          **********          **********

                                            HYDROGRAPH BALANCE

                   BALANCED HYDROGRAPH INFLOW TO  RESERVOIR    AREA A

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                      1      88       0       0       0       0       1

              BALANCE DESIRED       1     7563.      24     84012.       0       0.       0       0.       0       0.
            BALANCE RESULTS               7563.             84012.              0.               0.              0.

 NUMBER OF ITERATIONS=  2

                                          END-OF-PERIOD FLOWS AT      1
                                                 SUM=     37263.
                 29.      196.      468.      924.     1376.     2009.     2333.     2550.     2701.     2824.
               2350.     2856.     2933.     3225.     3651.     4030.     4517.     5477.     7563.     6490.
               5706.     4893.     4212.     3698.     3135.     2342.     1567.     1014.      670.      428.
                271.      158.       97.       57.       32.       17.        6.        0.        0.        0.
                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.

                                     PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                           CFS      7563.     5775.     3501.     1745.          37263.
                        INCHES                 3.11      7.53      7.82            7.82
                         AC-FT                2865.     6947.     7216.           7216.
```

```
*OVF*
                                            STATION     1

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
   0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 . I       .         .         .         .         .         .         .         .         .         .         .         .
  3 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  4 .       I .         .         .         .         .         .         .         .         .         .         .         .
  5 .         .   I     .         .         .         .         .         .         .         .         .         .         .
  6 .         .         I         .         .         .         .         .         .         .         .         .         .
  7 .         .         .   I     .         .         .         .         .         .         .         .         .         .
  8 .         .         .     I   .         .         .         .         .         .         .         .         .         .
  9 .         .         .      I  .         .         .         .         .         .         .         .         .         .
 10 .         .         .       I .         .         .         .         .         .         .         .         .         .
 11 .         .         .       I .         .         .         .         .         .         .         .         .         .
 12 .         .         .        I.         .         .         .         .         .         .         .         .         .
 13 .         .         .        I.         .         .         .         .         .         .         .         .         .
 14 .         .         .         . I       .         .         .         .         .         .         .         .         .
 15 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 16 .         .         .         .         I         .         .         .         .         .         .         .         .
 17 .         .         .         .         .    I    .         .         .         .         .         .         .         .
 18 .         .         .         .         .         .    I    .         .         .         .         .         .         .
 19 .         .         .         .         .         .         .         .     I   .         .         .         .         .
 20 .         .         .         .         .         .         .    I    .         .         .         .         .         .
 21 .         .         .         .         .         .      I  .         .         .         .         .         .         .
 22 .         .         .         .         .        I.         .         .         .         .         .         .         .
 23 .         .         .         .         . I       .         .         .         .         .         .         .         .
 24 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 25 .         .         .         .I        .         .         .         .         .         .         .         .         .
 26 .         .         .  I      .         .         .         .         .         .         .         .         .         .
 27 .         .     I   .         .         .         .         .         .         .         .         .         .         .
 28 .         I         .         .         .         .         .         .         .         .         .         .         .
 29 .      I  .         .         .         .         .         .         .         .         .         .         .         .
 30 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 31 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 32 . I       .         .         .         .         .         .         .         .         .         .         .         .
 33 .I        .         .         .         .         .         .         .         .         .         .         .         .
 34 .I        .         .         .         .         .         .         .         .         .         .         .         .
 35 I         .         .         .         .         .         .         .         .         .         .         .         .
 36 I         .         .         .         .         .         .         .         .         .         .         .         .
 37 I         .         .         .         .         .         .         .         .         .         .         .         .
 38 I         .         .         .         .         .         .         .         .         .         .         .         .
 39 I         .         .         .         .         .         .         .         .         .         .         .         .
 40 I         .         .         .         .         .         .         .         .         .         .         .         .
 41 I         .         .         .         .         .         .         .         .         .         .         .         .
 42 I         .         .         .         .         .         .         .         .         .         .         .         .
 43 I         .         .         .         .         .         .         .         .         .         .         .         .
 44 I         .         .         .         .         .         .         .         .         .         .         .         .
 45 I         .         .         .         .         .         .         .         .         .         .         .         .
 46 I         .         .         .         .         .         .         .         .         .         .         .         .
 47 I         .         .         .         .         .         .         .         .         .         .         .         .
 48 I         .         .         .         .         .         .         .         .         .         .         .         .
 49 I         .         .         .         .         .         .         .         .         .         .         .         .
 50 I         .         .         .         .         .         .         .         .         .         .         .         .
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[illegible]

          **********          **********          **********          **********          **********

                                                  HYDROGRAPH ROUTING

                  ROUTE FLOW  THRU RESERVOIR   POINT 1

                                  ISTAQ     ICOMP     IECON     ITAPE      JPLT      JPRT     INAME
                                      1         1         0         0         0         0         1
                                                         ROUTING DATA
                                            QLOSS     CLOSS       AVG      IRES     ISAME
                                              0.0     0.000      0.00         1         0

                                  NSTPS     NSTDL       LAG     AMSKK         X       TSK     STORA
                                      0         0         0     0.000     0.000     0.000     3804.

         STORAGE=          0.      3804.      3899.      3995.      4092.      4191.      4292.      4394.      4498.      4604.
         OUTFLOW=          0.       100.       557.      1408.      2529.      3880.      5438.      7192.      9127.     11243.

                                            TIME  EOP STOR    AVG IN   EOP OUT
                                               1     3798.       29.      100.
                                               2     3799.      113.      100.
                                               3     3816.      331.      157.
                                               4     3850.      645.      319.
                                               5     3903.     1100.      591.
                                               6     3969.     1592.     1181.
                                               7     4028.     2198.     1792.
                                               8     4066.     2462.     2230.
                                               9     4088.     2625.     2486.
                                              10     4103.     2762.     2680.
                                              11     4111.     2837.     2793.
                                              12     4115.     2853.     2845.
                                              13     4118.     2895.     2883.
                                              14     4128.     3079.     3023.
                                              15     4150.     3434.     3322.
                                              16     4178.     3840.     3696.
                                              17     4207.     4274.     4131.
                                              18     4251.     4997.     4806.
                                              19     4336.     6520.     6183.
                                              20     4376.     7027.     6885.
                                              21     4373.     6098.     6831.
                                              22     4293.     5301.     5457.
                                              23     4248.     4553.     4752.
                                              24     4207.     3955.     4132.
                                              25     4170.     3417.     3597.
                                              26     4125.     2733.     2978.
                                              27     4070.     1955.     2270.
                                              28     4015.     1293.     1639.
                                              29     3968.      844.     1173.
                                              30     3931.      549.      838.
                                              31     3901.      350.      576.
                                              32     3877.      214.      449.
                                              33     3854.      127.      342.
                                              34     3836.       77.      254.
                                              35     3822.       44.      185.
                                              36     3811.       24.      131.
                                              37     3802.       11.      100.
                                              38     3794.        5.      100.
          39     3786.        0.      100.
          40     3777.        0.       99.
          41     3769.        0.       99.
          42     3761.        0.       99.
          43     3753.        0.       99.
          44     3745.        0.       98.
          45     3737.        0.       98.
          46     3729.        0.       98.
          47     3720.        0.       98.
          48     3712.        0.       98.
          49     3704.        0.       97.
          50     3696.        0.       97.

         SUM                         98579.

              PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
     CFS     6895.     5720.     3465.     1772.         98579.
  INCHES                3.08      7.45      7.94           7.94
   AC-FT               2834.     6876.     7324.          7324.
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```
 *OVF*

                                                 STATION      1


                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
        1 IO        .         .         .         .         .         .         .         .         .         .         .         .
        2 .I        .         .         .         .         .         .         .         .         .         .         .         .
        3 . OI      .         .         .         .         .         .         .         .         .         .         .         .
        4 .  O  I   .         .         .         .         .         .         .         .         .         .         .         .
        5 .     O   .I        .         .         .         .         .         .         .         .         .         .         .
        6 .         . O    I  .         .         .         .         .         .         .         .         .         .         .
        7 .         .       O . I       .         .         .         .         .         .         .         .         .         .
        8 .         .         . O  I    .         .         .         .         .         .         .         .         .         .
        9 .         .         .    OI   .         .         .         .         .         .         .         .         .         .
       10 .         .         .      OI .         .         .         .         .         .         .         .         .         .
       11 .         .         .       I .         .         .         .         .         .         .         .         .         .
       12 .         .         .       OI.         .         .         .         .         .         .         .         .         .
       13 .         .         .        I.         .         .         .         .         .         .         .         .         .
       14 .         .         .         OI        .         .         .         .         .         .         .         .         .
       15 .         .         .         .  OI     .         .         .         .         .         .         .         .         .
       16 .         .         .         .      OI .         .         .         .         .         .         .         .         .
       17 .         .         .         .         .O I      .         .         .         .         .         .         .         .
       18 .         .         .         .         .       O I         .         .         .         .         .         .         .
       19 .         .         .         .         .         .         . O  I    .         .         .         .         .         .
       20 .         .         .         .         .         .         .        OI         .         .         .         .         .
       21 .         .         .         .         .         .         .IO       .         .         .         .         .         .
       22 .         .         .         .         .         .  I O    .         .         .         .         .         .         .
       23 .         .         .         .         .     I O .         .         .         .         .         .         .         .
       24 .         .         .         .         IO        .         .         .         .         .         .         .         .
       25 .         .         .         .   I O   .         .         .         .         .         .         .         .         .
       26 .         .         .      I  O         .         .         .         .         .         .         .         .         .
       27 .         .         I  O      .         .         .         .         .         .         .         .         .         .
       28 .         .  I  O   .         .         .         .         .         .         .         .         .         .         .
       29 .       I . O       .         .         .         .         .         .         .         .         .         .         .
       30 .    I  O .         .         .         .         .         .         .         .         .         .         .         .
       31 .  I  O   .         .         .         .         .         .         .         .         .         .         .         .
       32 . I O     .         .         .         .         .         .         .         .         .         .         .         .
       33 .I O      .         .         .         .         .         .         .         .         .         .         .         .
       34 .I O      .         .         .         .         .         .         .         .         .         .         .         .
       35 I O       .         .         .         .         .         .         .         .         .         .         .         .
       36 IO        .         .         .         .         .         .         .         .         .         .         .         .
       37 IO        .         .         .         .         .         .         .         .         .         .         .         .
       38 IO        .         .         .         .         .         .         .         .         .         .         .         .
       39 IO        .         .         .         .         .         .         .         .         .         .         .         .
       40 IO        .         .         .         .         .         .         .         .         .         .         .         .
       41 IO        .         .         .         .         .         .         .         .         .         .         .         .
       42 IO        .         .         .         .         .         .         .         .         .         .         .         .
       43 IO        .         .         .         .         .         .         .         .         .         .         .         .
       44 IO        .         .         .         .         .         .         .         .         .         .         .         .
       45 IO        .         .         .         .         .         .         .         .         .         .         .         .
       46 IO        .         .         .         .         .         .         .         .         .         .         .         .
       47 IO        .         .         .         .         .         .         .         .         .         .         .         .
       48 IO        .         .         .         .         .         .         .         .         .         .         .         .
       49 IO        .         .         .         .         .         .         .         .         .         .         .         .
       50 IO        .         .         .         .         .         .         .         .         .         .         .         .
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          **********          **********          **********          **********          **********

                                             HYDROGRAPH ROUTING

                 ROUTE  STEVENS CREEK RESERVOIR OUTFLOW  DOWN TO  RTE 280    POINT 2

                           ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                               2       1       0       0       0       0       1
                                               ROUTING DATA
                                   QLOSS   CLOSS     AVG    IRES   ISAME
                                     0.0   0.000    0.00       1       0

                           NSTPS   NSTDL     LAG   AMSKK       X     TSK   STORA
                               0       0       0   0.000   0.000   0.000      0.

        STORAGE=       0.      50.     100.     150.     250.     380.        0.        0.        0.        0.
        OUTFLOW=       0.     500.    1500.    2500.    6500.   13000.        0.        0.        0.        0.

                                   TIME  EOP STOR    AVG IN   EOP OUT
                                      1        6.      100.       58.
                                      2        8.      100.       83.
                                      3       11.      129.      110.
                                      4       18.      238.      185.
                                      5       34.      455.      343.
                                      6       62.      886.      742.
                                      7       96.     1487.     1416.
                                      8      123.     2011.     1954.
                                      9      141.     2358.     2319.
                                     10      152.     2533.     2580.
                                     11      157.     2737.     2775.
                                     12      158.     2815.     2824.
                                     13      159.     2857.     2865.
                                     14      162.     2951.     2972.
                                     15      168.     3173.     3222.
                                     16      177.     3509.     3580.
                                     17      187.     3913.     3995.
                                     18      202.     4468.     4585.
                                     19      231.     5497.     5721.
                                     20      255.     6576.     6756.
                                     21      250.     6558.     6490.
                                     22      230.     5844.     5635.
                                     23      212.     5195.     4962.
                                     24      195.     4442.     4314.
                                     25      181.     3865.     3734.
                                     26      167.     3283.     3173.
                                     27      150.     2574.     2492.
                                     28      125.     1954.     2005.
                                     29       93.     1405.     1463.
                                     30       77.     1006.     1049.
                                     31       62.      707.      740.
                                     32       52.      513.      534.
                                     33       44.      396.      441.
                                     34       36.      298.      357.
                                     35       28.      219.      277.
                                     36       21.      159.      207.
                                     37       15.      116.      154.
                                     38       12.      100.      122.
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```
                  39          11.        100.        109.
                  40          10.         99.        103.
                  41          10.         99.        101.
                  42          10.         99.        100.
                  43          10.         99.         99.
                  44          10.         99.         99.
                  45          10.         98.         99.
                  46          10.         98.         98.
                  47          10.         98.         98.
                  48          10.         98.         98.
                  49          10.         97.         98.
                  50          10.         97.         97.

                 SUM                                88511.

              PEAK    6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
       CFS   6756.     5700.      3456.      1770.         88511.
    INCHES              3.05       7.43       7.93           7.93
     AC-FT             2828.      6859.      7319.          7319.
```

```
*OVF*
                                            STATION    2

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
  1 .I        .         .         .         .         .         .         .         .         .         .         .         .
  2 .I        .         .         .         .         .         .         .         .         .         .         .         .
  3 .I        .         .         .         .         .         .         .         .         .         .         .         .
  4 . I       .         .         .         .         .         .         .         .         .         .         .         .
  5 .  O I    .         .         .         .         .         .         .         .         .         .         .         .
  6 .      O I.         .         .         .         .         .         .         .         .         .         .         .
  7 .         .   OI    .         .         .         .         .         .         .         .         .         .         .
  8 .         .         I         .         .         .         .         .         .         .         .         .         .
  9 .         .         .  OI     .         .         .         .         .         .         .         .         .         .
 10 .         .         .     I   .         .         .         .         .         .         .         .         .         .
 11 .         .         .      IO .         .         .         .         .         .         .         .         .         .
 12 .         .         .       I .         .         .         .         .         .         .         .         .         .
 13 .         .         .        I.         .         .         .         .         .         .         .         .         .
 14 .         .         .         I         .         .         .         .         .         .         .         .         .
 15 .         .         .         . I       .         .         .         .         .         .         .         .         .
 16 .         .         .         .    IO   .         .         .         .         .         .         .         .         .
 17 .         .         .         .        IO         .         .         .         .         .         .         .         .
 18 .         .         .         .         .    IO   .         .         .         .         .         .         .         .
 19 .         .         .         .         .         .    I O  .         .         .         .         .         .         .
 20 .         .         .         .         .         .         .    I  O .         .         .         .         .         .
 21 .         .         .         .         .         .         .    OI   .         .         .         .         .         .
 22 .         .         .         .         .         .      OI .         .         .         .         .         .         .
 23 .         .         .         .         .         OI        .         .         .         .         .         .         .
 24 .         .         .         .         .  OI     .         .         .         .         .         .         .         .
 25 .         .         .         .       OI.         .         .         .         .         .         .         .         .
 26 .         .         .         . OI      .         .         .         .         .         .         .         .         .
 27 .         .         .    OI   .         .         .         .         .         .         .         .         .         .
 28 .         .         I         .         .         .         .         .         .         .         .         .         .
 29 .         .   IO    .         .         .         .         .         .         .         .         .         .         .
 30 .         I         .         .         .         .         .         .         .         .         .         .         .
 31 .      I  .         .         .         .         .         .         .         .         .         .         .         .
 32 .    I    .         .         .         .         .         .         .         .         .         .         .         .
 33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 34 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 35 . IO      .         .         .         .         .         .         .         .         .         .         .         .
 36 . I       .         .         .         .         .         .         .         .         .         .         .         .
 37 .IO       .         .         .         .         .         .         .         .         .         .         .         .
 38 .I        .         .         .         .         .         .         .         .         .         .         .         .
 39 .I        .         .         .         .         .         .         .         .         .         .         .         .
 40 .I        .         .         .         .         .         .         .         .         .         .         .         .
 41 .I        .         .         .         .         .         .         .         .         .         .         .         .
 42 .I        .         .         .         .         .         .         .         .         .         .         .         .
 43 .I        .         .         .         .         .         .         .         .         .         .         .         .
 44 .I        .         .         .         .         .         .         .         .         .         .         .         .
 45 .I        .         .         .         .         .         .         .         .         .         .         .         .
 46 .I        .         .         .         .         .         .         .         .         .         .         .         .
 47 .I        .         .         .         .         .         .         .         .         .         .         .         .
 48 .I        .         .         .         .         .         .         .         .         .         .         .         .
 49 .I        .         .         .         .         .         .         .         .         .         .         .         .
 50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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DYN

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**********           **********           **********           **********           **********

                                  SUB-AREA RUNOFF COMPUTATION

       RUNOFF HYDROGRAPH LOCAL INFLOW  AT RTE 280  (AREA B)   POINT 2

                          ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                              2        0        0        0        0        0        1

                                         HYDROGRAPH DATA
            IHYDG     IUHG    TAREA     SNAP    TRSDA    TRSPC    RATIO    ISNOW    ISAME    LOCAL
                0        0     3.60     0.00     0.00     0.00    0.000        0        0        0

                                           PRECIP DATA
                                   NP   STORM      DAJ      DAK
                                   24    7.01     0.00     0.00
                                          PRECIP PATTERN
  1.61       2.42       2.10       3.39       4.19       3.71       3.23       3.71       3.87       3.39
  3.39       3.71       3.87       5.64       4.19       6.61       6.29      11.77       4.67       4.36
  3.71       3.39       3.55       3.23

                                            LOSS DATA
           STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
           0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.090    0.000    0.150

                                      UNIT HYDROGRAPH DATA
                               TC=  1.50     R=  1.20     NTA=  0

                                          RECESSION DATA
                          STRTQ=     0.00     QRCSN=     0.00     RTIOR= 1.00

       UNIT HYDROGRAPH  7 END-OF-PERIOD ORDINATES, LAG=   1.38 HOURS, CP= 0.60  VOL= 1.00
  497.       888.       551.       227.        93.        38.        15.

                                        END-OF-PERIOD FLOW
                               TIME    RAIN   EXCS      COMP Q
                                  1 0.1129 0.0364         18.
                                  2 0.1696 0.0931         79.
                                  3 0.1472 0.0707        138.
                                  4 0.2376 0.1611        202.
                                  5 0.2937 0.2172        315.
                                  6 0.2601 0.1836        399.
                                  7 0.2264 0.1499        405.
                                  8 0.2601 0.1836        394.
                                  9 0.2713 0.1948        412.
                                 10 0.2376 0.1611        416.
                                 11 0.2376 0.1611        397.
                                 12 0.2601 0.1836        393.
                                 13 0.2713 0.1948        413.
                                 14 0.3954 0.3189        495.
                                 15 0.2937 0.2172        564.
                                 16 0.4634 0.3869        631.
                                 17 0.4409 0.3644        745.
                                 18 0.8251 0.7486        998.
                                 19 0.3274 0.2509       1114.
                                 20 0.3056 0.2291        882.
                                 21 0.2601 0.1836        655.
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                    22 0.2376 0.1611        516.
                    23 0.2489 0.1724        440.
                    24 0.2264 0.1499        401.
                    25 0.0000 0.0000        295.
                    26 0.0000 0.0000        148.
                    27 0.0000 0.0000         59.
                    28 0.0000 0.0000         23.
                    29 0.0000 0.0000          9.
                    30 0.0000 0.0000          2.
                    31 0.0000 0.0000          0.
                    32 0.0000 0.0000          0.
                    33 0.0000 0.0000          0.
                    34 0.0000 0.0000          0.
                    35 0.0000 0.0000          0.
                    36 0.0000 0.0000          0.
                    37 0.0000 0.0000          0.
                    38 0.0000 0.0000          0.
                    39 0.0000 0.0000          0.
                    40 0.0000 0.0000          0.
                    41 0.0000 0.0000          0.
                    42 0.0000 0.0000          0.
                    43 0.0000 0.0000          0.
                    44 0.0000 0.0000          0.
                    45 0.0000 0.0000          0.
                    46 0.0000 0.0000          0.
                    47 0.0000 0.0000          0.
                    48 0.0000 0.0000          0.
                    49 0.0000 0.0000          0.
                    50 0.0000 0.0000          0.

                   SUM   7.03   5.15      11958.

                PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
      CFS      1114.      837.       490.       239.          11957.
   INCHES                 2.16       5.07       5.15            5.15
    AC-FT                 415.       973.       989.            989.
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```
*OVF*
                                              STATION     2

                         INFLOW(I), OUTPLOW(O) AND OBSERVED FLOW(*)
    0.      200.      400.      600.      800.     1000.     1200.        0.        0.        0.        0.        0.        0.
                                                                                                    PRECIP(L) AND EXCESS(X)
   0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
    1 .I        .         .         .         .         .         .         .         .         .         .         .       LLXX
    2 .   I     .         .         .         .         .         .         .         .         .         .         .      LLXXX
    3 .      I  .         .         .         .         .         .         .         .         .         .         .      LLXXX
    4 .         I         .         .         .         .         .         .         .         .         .         .     LLXXXX
    5 .         .     I   .         .         .         .         .         .         .         .         .         .   LLXXXXXX
    6 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXXX
    7 .         .         I         .         .         .         .         .         .         .         .         .    LLXXXXX
    8 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXXX
    9 .         .         .I        .         .         .         .         .         .         .         .         .   LLXXXXXX
   10 .         .         .I        .         .         .         .         .         .         .         .         .    LLXXXXX
   11 .         .         I         .         .         .         .         .         .         .         .         .    LLXXXXX
   12 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXXX
   13 .         .         .I        .         .         .         .         .         .         .         .         .   LLXXXXXX
   14 .         .         .    I    .         .         .         .         .         .         .         .          LLXXXXXXXXX
   15 .         .         .       I .         .         .         .         .         .         .         .         .   LLXXXXXX
   16 .         .         .         .  I      .         .         .         .         .         .         .        LLXXXXXXXXXXX
   17 .         .         .         .      I  .         .         .         .         .         .         .         LLXXXXXXXXXXXX
   18 .         .         .         .         .         I         .         .         .         .         LLXXXXXXXXXXXXXXXXXXXX
   19 .         .         .         .         .         .     I   .         .         .         .         .         .  LLXXXXXXX
   20 .         .         .         .         .   I     .         .         .         .         .         .         .  LLXXXXXXX
   21 .         .         .         .  I      .         .         .         .         .         .         .         .   LLXXXXXX
   22 .         .         .     I   .         .         .         .         .         .         .         .         .    LLXXXXX
   23 .         .         . I       .         .         .         .         .         .         .         .         .    LLXXXXX
   24 .         .         I         .         .         .         .         .         .         .         .         .    LLXXXXX
   25 .         .    I    .         .         .         .         .         .         .         .         .         .    LLXXXXX
   26 .      I  .         .         .         .         .         .         .         .         .         .         .          L
   27 .  I      .         .         .         .         .         .         .         .         .         .         .          L
   28 .I        .         .         .         .         .         .         .         .         .         .         .          L
   29 I         .         .         .         .         .         .         .         .         .         .         .          L
   30 I         .         .         .         .         .         .         .         .         .         .         .          L
   31 I         .         .         .         .         .         .         .         .         .         .         .          L
   32 I         .         .         .         .         .         .         .         .         .         .         .          L
   33 I         .         .         .         .         .         .         .         .         .         .         .          L
   34 I         .         .         .         .         .         .         .         .         .         .         .          L
   35 I         .         .         .         .         .         .         .         .         .         .         .          L
   36 I         .         .         .         .         .         .         .         .         .         .         .          L
   37 I         .         .         .         .         .         .         .         .         .         .         .          L
   38 I         .         .         .         .         .         .         .         .         .         .         .          L
   39 I         .         .         .         .         .         .         .         .         .         .         .          L
   40 I         .         .         .         .         .         .         .         .         .         .         .          L
   41 I         .         .         .         .         .         .         .         .         .         .         .          L
   42 I         .         .         .         .         .         .         .         .         .         .         .          L
   43 I         .         .         .         .         .         .         .         .         .         .         .          L
   44 I         .         .         .         .         .         .         .         .         .         .         .          L
   45 I         .         .         .         .         .         .         .         .         .         .         .          L
   46 I         .         .         .         .         .         .         .         .         .         .         .          L
   47 I         .         .         .         .         .         .         .         .         .         .         .          L
   48 I         .         .         .         .         .         .         .         .         .         .         .          L
   49 I         .         .         .         .         .         .         .         .         .         .         .          L
   50 I         .         .         .         .         .         .         .         .         .         .         .          L
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*QVN*

        **********          **********          **********          **********          **********

                                                HYDROGRAPH BALANCE

                      BALANCED HYDROGRAPH LOCAL INFLOW   AT  RTE 280  (AREA 8)  POINT 2

                                         ISTAQ    ICOMP   IECON    ITAPE    JPLT     JPRT    INAME
                                             2       88       0        0       0        0        1

                BALANCE DESIRED       1      1093.      24     10987.       0         0.       0         0.       0         0.
             BALANCE RESULTS                1093.            10987.                  0.                 0.                 0.

   NUMBER OF ITERATIONS=  1

                                                 END-OF-PERIOD FLOWS AT      2
                                                        SUM=     11163.
                  15.       73.       120.      188.      292.      371.      376.      366.      382.      397.
                 368.      365.       383.      459.      524.      586.      691.      927.     1093.      919.
                 609.      480.       409.      372.      274.      137.       55.       22.        8.        2.
                   0.        0.         0.        0.        0.        0.        0.        0.        0.        0.
                   0.        0.         0.        0.        0.        0.        0.        0.        0.        0.

                                           PEAK     6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
                                  CFS     1093.       785.       453.       223.          11163.
                               INCHES                 2.03       4.73       4.81            4.81
                                AC-FT                  391.       908.       923.            923.
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*OVF*
                                            STATION      2

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
  1 .I        .         .         .         .         .         .         .         .         .         .         .         .
  2 . I       .         .         .         .         .         .         .         .         .         .         .         .
  3 . I       .         .         .         .         .         .         .         .         .         .         .         .
  4 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  5 .     I   .         .         .         .         .         .         .         .         .         .         .         .
  6 .         .I        .         .         .         .         .         .         .         .         .         .         .
  7 .         .       I .         .         .         .         .         .         .         .         .         .         .
  8 .         .         .  I      .         .         .         .         .         .         .         .         .         .
  9 .         .         .      I  .         .         .         .         .         .         .         .         .         .
 10 .         .         .         I         .         .         .         .         .         .         .         .         .
 11 .         .         .         .I        .         .         .         .         .         .         .         .         .
 12 .         .         .         . I       .         .         .         .         .         .         .         .         .
 13 .         .         .         . I       .         .         .         .         .         .         .         .         .
 14 .         .         .         .   I     .         .         .         .         .         .         .         .         .
 15 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 16 .         .         .         .         . I       .         .         .         .         .         .         .         .
 17 .         .         .         .         .      I  .         .         .         .         .         .         .         .
 18 .         .         .         .         .         .    I    .         .         .         .         .         .         .
 19 .         .         .         .         .         .         .       I .         .         .         .         .         .
 20 .         .         .         .         .         .         .         .     I   .         .         .         .         .
 21 .         .         .         .         .         .         .         .I        .         .         .         .         .
 22 .         .         .         .         .         .         . I       .         .         .         .         .         .
 23 .         .         .         .         .         .   I     .         .         .         .         .         .         .
 24 .         .         .         .         .      I  .         .         .         .         .         .         .         .
 25 .         .         .         .         I         .         .         .         .         .         .         .         .
 26 .         .         .         .  I      .         .         .         .         .         .         .         .         .
 27 .         .         .    I    .         .         .         .         .         .         .         .         .         .
 28 .         .         I         .         .         .         .         .         .         .         .         .         .
 29 .         .    I    .         .         .         .         .         .         .         .         .         .         .
 30 .         .I        .         .         .         .         .         .         .         .         .         .         .
 31 .      I  .         .         .         .         .         .         .         .         .         .         .         .
 32 .    I    .         .         .         .         .         .         .         .         .         .         .         .
 33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 34 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 35 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 36 . I       .         .         .         .         .         .         .         .         .         .         .         .
 37 . I       .         .         .         .         .         .         .         .         .         .         .         .
 38 .I        .         .         .         .         .         .         .         .         .         .         .         .
 39 .I        .         .         .         .         .         .         .         .         .         .         .         .
 40 .I        .         .         .         .         .         .         .         .         .         .         .         .
 41 .I        .         .         .         .         .         .         .         .         .         .         .         .
 42 .I        .         .         .         .         .         .         .         .         .         .         .         .
 43 .I        .         .         .         .         .         .         .         .         .         .         .         .
 44 .I        .         .         .         .         .         .         .         .         .         .         .         .
 45 .I        .         .         .         .         .         .         .         .         .         .         .         .
 46 .I        .         .         .         .         .         .         .         .         .         .         .         .
 47 .I        .         .         .         .         .         .         .         .         .         .         .         .
 48 .I        .         .         .         .         .         .         .         .         .         .         .         .
 49 .I        .         .         .         .         .         .         .         .         .         .         .         .
 50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVF*
                                            STATION     2

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.    100.      200.      300.      400.      500.      600.      700.      800.      900.     1000.     1100.              0.
  1 . I       .         .         .         .         .         .         .         .         .         .         .         .
  2 .      I  .         .         .         .         .         .         .         .         .         .         .         .
  3 .         .  I      .         .         .         .         .         .         .         .         .         .         .
  4 .         .        I.         .         .         .         .         .         .         .         .         .         .
  5 .         .         .        I.         .         .         .         .         .         .         .         .         .
  6 .         .         .         .      I  .         .         .         .         .         .         .         .         .
  7 .         .         .         .       I .         .         .         .         .         .         .         .         .
  8 .         .         .         .      I  .         .         .         .         .         .         .         .         .
  9 .         .         .         .       I .         .         .         .         .         .         .         .         .
 10 .         .         .         .        I.         .         .         .         .         .         .         .         .
 11 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 12 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 13 .         .         .         .       I .         .         .         .         .         .         .         .         .
 14 .         .         .         .         .     I   .         .         .         .         .         .         .         .
 15 .         .         .         .         .         . I       .         .         .         .         .         .         .
 16 .         .         .         .         .         .        I.         .         .         .         .         .         .
 17 .         .         .         .         .         .         .        I.         .         .         .         .         .
 18 .         .         .         .         .         .         .         .         .         .  I      .         .         .
 19 .         .         .         .         .         .         .         .         .         .         .        I.         .
 20 .         .         .         .         .         .         .         .         . I       .         .         .         .
 21 .         .         .         .         .         .         .I        .         .         .         .         .         .
 22 .         .         .         .         .       I .         .         .         .         .         .         .         .
 23 .         .         .         .         .I        .         .         .         .         .         .         .         .
 24 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 25 .         .         .      I  .         .         .         .         .         .         .         .         .         .
 26 .         .   I     .         .         .         .         .         .         .         .         .         .         .
 27 .     I   .         .         .         .         .         .         .         .         .         .         .         .
 28 . I       .         .         .         .         .         .         .         .         .         .         .         .
 29 .I        .         .         .         .         .         .         .         .         .         .         .         .
 30 I         .         .         .         .         .         .         .         .         .         .         .         .
 31 I         .         .         .         .         .         .         .         .         .         .         .         .
 32 I         .         .         .         .         .         .         .         .         .         .         .         .
 33 I         .         .         .         .         .         .         .         .         .         .         .         .
 34 I         .         .         .         .         .         .         .         .         .         .         .         .
 35 I         .         .         .         .         .         .         .         .         .         .         .         .
 36 I         .         .         .         .         .         .         .         .         .         .         .         .
 37 I         .         .         .         .         .         .         .         .         .         .         .         .
 38 I         .         .         .         .         .         .         .         .         .         .         .         .
 39 I         .         .         .         .         .         .         .         .         .         .         .         .
 40 I         .         .         .         .         .         .         .         .         .         .         .         .
 41 I         .         .         .         .         .         .         .         .         .         .         .         .
 42 I         .         .         .         .         .         .         .         .         .         .         .         .
 43 I         .         .         .         .         .         .         .         .         .         .         .         .
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 46 I         .         .         .         .         .         .         .         .         .         .         .         .
 47 I         .         .         .         .         .         .         .         .         .         .         .         .
 48 I         .         .         .         .         .         .         .         .         .         .         .         .
 49 I         .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*



          **********          **********          **********          **********          **********

                                         COMBINE HYDROGRAPHS

              COMBINE LOCAL INFLOW (AREA B) WITH FLOW ROUTED FROM  RESERVOIR   AT POINT 2

                                ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                    2        2        0        0        0        0        1


                                          SUM OF 2 HYDROGRAPHS AT      2
          74.       156.       238.       373.       635.      1119.      1792.      2320.      2702.      2966.
        3144.      3190.      3249.      3431.      3746.      4166.      4687.      5512.      6814.      7575.
        7099.      6165.      5370.      4686.      4028.      3310.      2547.      2027.      1471.      1051.
         740.       534.       441.       357.       277.       207.       154.       122.       109.       103.
         101.       100.        99.        99.        99.        98.        98.        98.        98.        97.

                                      PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                             CFS     7575.     6422.     3880.     1993.        99674.
                          INCHES               2.86      6.91      7.39          7.39
                           AC-FT               3186.     7700.     8242.         8242.
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*OVN*

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                                 RUNOFF SUMMARY, AVERAGE FLOW

                                      PEAK    6-HOUR   24-HOUR   72-HOUR      AREA
              HYDROGRAPH AT       1  7563.     5775.     3501.     1745.     17.30
              ROUTED TO           1  6885.     5720.     3465.     1772.     17.30
              ROUTED TO           2  6756.     5700.     3456.     1770.     17.30
              HYDROGRAPH AT       2  1093.      788.      458.      223.      3.60
              ROUTED TO           2  1093.      788.      458.      223.      3.60
               2 COMBINED         2  7575.     6422.     3880.     1993.     20.90
```

2-b

(adjusted inflow volume)

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******************************
HEC-1 VERSION DATED JAN 1973
UPDATED AUG 74
CHANGE NO. 01
******************************
                 STEVENS CREEK  HYDROLOGY   100 YEAR  FLOOD HYDROGRAPHS      RESERVOIR          2000 AF

                                          JOB SPECIFICATION
                              NQ    NHR   NMIN  IDAY   IHR  IMIN METRC  IPLT  IPRT NSTAN
                              50      1      0     0     0     0     0     2     0     0
                                               JOPER       NWT
                                                   3         0



          **********          **********          **********          **********          **********

                                       SUB-AREA RUNOFF COMPUTATION

                RUNOFF HYDROGRAPH  INFLOW TO RESERVOIR   (AREA A)     POINT 1

                              ISTAQ     ICOMP     IECON     ITAPE      JPLT      JPRT     INAME
                                  1         0         0         0         0         0         1

                                              HYDROGRAPH DATA
              IHYDG     IUHG    TAREA      SNAP     TRSDA     TRSPC     RATIO     ISNOW     ISAME     LOCAL
                  0        0    17.30      0.00      0.00      0.00     0.000         0         0         0

                                                 PRECIP DATA
                                         NP    STORM      DAJ      DAK
                                         24    10.18     0.00     0.00
                                               PRECIP PATTERN
       1.66        2.32        2.15        3.49        4.32        3.66        3.32        3.82        3.82        3.49
       3.49        3.82        3.95        5.82        4.16        6.32        6.15       10.95        4.65        4.47
       3.82        3.49        3.49        3.32

                                                  LOSS DATA
              STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
              0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.130    0.000    0.000

                                             UNIT HYDROGRAPH DATA
                                      TC=  2.30      R=  2.40      NTA=  6

                                         UNIT GRAPH TIME-AREA ORDINATES
       0.15        3.18        6.70       10.55       15.00       17.30

                                              RECESSION DATA
                                STRTQ      0.00     QRCSN=     0.00     RTIOR= 1.00

                 UNIT HYDROGRAPH 14 END-OF-PERIOD ORDINATES, LAG=   2.06 HOURS, CP= 0.52  VOL= 1.00
       820.       2294.       2607.       1375.       1223.        805.        527.        345.        226.        148.
        97.         64.         42.         27.

                                             END-OF-PERIOD FLOW
                                       TIME   RAIN   EXCS    COMP Q
                                          1 0.1690 0.0390       32.
                                          2 0.2362 0.1062      176.
                                          3 0.2199 0.0899      419.
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                               4 0.3553 0.2253        741.
                               5 0.4398 0.3098       1252.
                               6 0.3726 0.2426       1827.
                               7 0.3380 0.2080       2173.
                               8 0.3889 0.2589       2321.
                               9 0.3889 0.2589       2458.
                              10 0.3553 0.2253       2570.
                              11 0.3553 0.2253       2594.
                              12 0.3889 0.2589       2599.
                              13 0.4052 0.2752       2670.
                              14 0.5925 0.4625       2935.
                              15 0.4235 0.2935       3322.
                              16 0.6434 0.5134       3668.
                              17 0.6261 0.4961       4111.
                              18 1.1157 0.9857       4985.
                              19 0.4734 0.3434       5907.
                              20 0.4550 0.3250       5907.
                              21 0.3889 0.2589       5193.
                              22 0.3553 0.2253       4454.
                              23 0.3553 0.2253       3834.
                              24 0.3380 0.2080       3366.
                              25 0.0000 0.0000       2853.
                              26 0.0000 0.0000       2132.
                              27 0.0000 0.0000       1427.
                              28 0.0000 0.0000        926.
                              29 0.0000 0.0000        602.
                              30 0.0000 0.0000        385.
                              31 0.0000 0.0000        243.
                              32 0.0000 0.0000        142.
                              33 0.0000 0.0000         87.
                              34 0.0000 0.0000         51.
                              35 0.0000 0.0000         29.
                              36 0.0000 0.0000         15.
                              37 0.0000 0.0000          6.
                              38 0.0000 0.0000          0.
                              39 0.0000 0.0000          0.
                              40 0.0000 0.0000          0.
                              41 0.0000 0.0000          0.
                              42 0.0000 0.0000          0.
                              43 0.0000 0.0000          0.
                              44 0.0000 0.0000          0.
                              45 0.0000 0.0000          0.
                              46 0.0000 0.0000          0.
                              47 0.0000 0.0000          0.
                              48 0.0000 0.0000          0.
                              49 0.0000 0.0000          0.
                              50 0.0000 0.0000          0.

                             SUM  10.22    7.10     78412.

                  PEAK     6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
       CFS       5907.      5093.      3145.      1568.         78412.
    INCHES                   2.74       6.76       7.03           7.03
     AC-FT                  2527.      6242.      6484.          6484.
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 *OVF*
                                                  STATION     1

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
                                                                                                        PRECIP(L) AND EXCESS(X)
       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
        1 I         .         .         .         .         .         .         .         .         .         .         .     LLLXX
        2 . I       .         .         .         .         .         .         .         .         .         .         .   LLLXXXX
        3 .   I     .         .         .         .         .         .         .         .         .         .         .    LLLXXX
        4 .      I  .         .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
        5 .         .  I      .         .         .         .         .         .         .         .         .        LLLXXXXXXXXX
        6 .         .       I .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
        7 .         .         . I       .         .         .         .         .         .         .         .         . LLLXXXXXX
        8 .         .         .  I      .         .         .         .         .         .         .         .         LLLLXXXXXXX
        9 .         .         .    I    .         .         .         .         .         .         .         .         LLLLXXXXXXX
       10 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
       11 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
       12 .         .         .     I   .         .         .         .         .         .         .         .         LLLLXXXXXXX
       13 .         .         .      I  .         .         .         .         .         .         .         .         LLLXXXXXXXX
       14 .         .         .        I.         .         .         .         .         .         .    LLLXXXXXXXXXXXXX
       15 .         .         .         .  I      .         .         .         .         .         .        LLLLXXXXXXXX
       16 .         .         .         .      I  .         .         .         .         .         .   LLLXXXXXXXXXXXXXX
       17 .         .         .         .         . I       .         .         .         .         .   LLLLXXXXXXXXXXXXX
       18 .         .         .         .         .         I         .         .         .         . LLLXXXXXXXXXXXXXXXXXXXXXXXXXX
       19 .         .         .         .         .         .        I.         .         .         .         .       LLLXXXXXXXXXX
       20 .         .         .         .         .         .        I.         .         .         .         .        LLLXXXXXXXXX
       21 .         .         .         .         .         . I       .         .         .         .         .         LLLLXXXXXXX
       22 .         .         .         .         .    I    .         .         .         .         .         .         .LLLXXXXXXX
       23 .         .         .         .       I .         .         .         .         .         .         .         .LLLXXXXXXX
       24 .         .         .         .   I     .         .         .         .         .         .         .         . LLLXXXXXX
       25 .         .         .        I.         .         .         .         .         .         .         .         .         L
       26 .         .         .I        .         .         .         .         .         .         .         .         .         L
       27 .         .   I     .         .         .         .         .         .         .         .         .         .         L
       28 .        I.         .         .         .         .         .         .         .         .         .         .         L
       29 .     I   .         .         .         .         .         .         .         .         .         .         .         L
       30 .   I     .         .         .         .         .         .         .         .         .         .         .         L
       31 . I       .         .         .         .         .         .         .         .         .         .         .         L
       32 .I        .         .         .         .         .         .         .         .         .         .         .         L
       33 .I        .         .         .         .         .         .         .         .         .         .         .         L
       34 .I        .         .         .         .         .         .         .         .         .         .         .         L
       35 I         .         .         .         .         .         .         .         .         .         .         .         L
       36 I         .         .         .         .         .         .         .         .         .         .         .         L
       37 I         .         .         .         .         .         .         .         .         .         .         .         L
       38 I         .         .         .         .         .         .         .         .         .         .         .         L
       39 I         .         .         .         .         .         .         .         .         .         .         .         L
       40 I         .         .         .         .         .         .         .         .         .         .         .         L
       41 I         .         .         .         .         .         .         .         .         .         .         .         L
       42 I         .         .         .         .         .         .         .         .         .         .         .         L
       43 I         .         .         .         .         .         .         .         .         .         .         .         L
       44 I         .         .         .         .         .         .         .         .         .         .         .         L
       45 I         .         .         .         .         .         .         .         .         .         .         .         L
       46 I         .         .         .         .         .         .         .         .         .         .         .         L
       47 I         .         .         .         .         .         .         .         .         .         .         .         L
       48 I         .         .         .         .         .         .         .         .         .         .         .         L
       49 I         .         .         .         .         .         .         .         .         .         .         .         L
       50 I         .         .         .         .         .         .         .         .         .         .         .         L
 *OVN*

          **********          **********          **********          **********          **********

                                                    HYDROGRAPH BALANCE

                  BALANCED HYDROGRAPH INFLOW TO  RESERVOIR    AREA A

                                      ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                          1      88       0       0       0       0       1

             BALANCE DESIRED      1      7563.      24    84012.      0        0.      0        0.      0        0.
          BALANCE RESULTS           7563.            84012.                 0.                0.                0.

    NUMBER OF ITERATIONS=  2

                                                 END-OF-PERIOD FLOWS AT      1
                                                        SUM=    87263.
                    29.       196.       466.       824.      1376.      2008.      2388.      2550.      2701.      2824.
                  2850.      2856.      2933.      3225.      3651.      4030.      4517.      5477.      7563.      6490.
                  5706.      4893.      4212.      3698.      3135.      2342.      1567.      1018.       670.       428.
                   271.       158.        97.        57.        32.        17.         6.         0.         0.         0.
                     0.         0.         0.         0.         0.         0.         0.         0.         0.         0.

                                             PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                   CFS      7563.     5775.     3501.     1745.         87263.
                                INCHES                 3.11      7.53      7.82           7.82
                                 AC-FT                2865.     6947.     7216.          7216.
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*BVF*
                                            STATION     1

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 . I       .         .         .         .         .         .         .         .         .         .         .         .
  3 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  4 .       I .         .         .         .         .         .         .         .         .         .         .         .
  5 .         .   I     .         .         .         .         .         .         .         .         .         .         .
  6 .         .         I         .         .         .         .         .         .         .         .         .         .
  7 .         .         .   I     .         .         .         .         .         .         .         .         .         .
  8 .         .         .     I   .         .         .         .         .         .         .         .         .         .
  9 .         .         .      I  .         .         .         .         .         .         .         .         .         .
 10 .         .         .       I .         .         .         .         .         .         .         .         .         .
 11 .         .         .       I .         .         .         .         .         .         .         .         .         .
 12 .         .         .        I.         .         .         .         .         .         .         .         .         .
 13 .         .         .        I.         .         .         .         .         .         .         .         .         .
 14 .         .         .         . I       .         .         .         .         .         .         .         .         .
 15 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 16 .         .         .         .         I         .         .         .         .         .         .         .         .
 17 .         .         .         .         .    I    .         .         .         .         .         .         .         .
 18 .         .         .         .         .         .    I    .         .         .         .         .         .         .
 19 .         .         .         .         .         .         .         .     I   .         .         .         .         .
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 44 I         .         .         .         .         .         .         .         .         .         .         .         .
 45 I         .         .         .         .         .         .         .         .         .         .         .         .
 46 I         .         .         .         .         .         .         .         .         .         .         .         .
 47 I         .         .         .         .         .         .         .         .         .         .         .         .
 48 I         .         .         .         .         .         .         .         .         .         .         .         .
 49 I         .         .         .         .         .         .         .         .         .         .         .         .
 50 I         .         .         .         .         .         .         .         .         .         .         .         .
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          **********          **********          **********          **********          **********

                                            HYDROGRAPH ROUTING

             ROUTE FLOW  THRU RESERVOIR   POINT 1

                              ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                  1        1        0        0        0        0        1
                                                  ROUTING DATA
                                        QLOSS    CLOSS      AVG     IRES    ISAME
                                          0.0    0.000     0.00        1        0

                              NSTPS    NSTDL      LAG    AMSKK        X      TSK    STORA
                                  0        0        0    0.000    0.000    0.000    2000.

  STORAGE=        0.     3804.     3899.     3995.     4092.     4191.     4292.     4394.     4498.     4604.
  OUTFLOW=        0.      100.      557.     1409.     2529.     3880.     5438.     7192.     9127.    11243.

                                        TIME  EOP STOR    AVG IN   EOP OUT
                                           1     1998.       29.       53.
                                           2     2003.      113.       53.
                                           3     2026.      331.       53.
                                           4     2075.      645.       55.
                                           5     2161.     1100.       57.
                                           6     2296.     1692.       60.
                                           7     2473.     2198.       65.
                                           8     2671.     2469.       70.
                                           9     2882.     2626.       76.
                                          10     3104.     2762.       82.
                                          11     3331.     2837.       88.
                                          12     3560.     2853.       94.
                                          13     3791.     2895.      100.
                                          14     3986.     3079.     1330.
                                          15     4104.     3438.     2694.
                                          16     4165.     3840.     3521.
                                          17     4204.     4274.     4078.
                                          18     4250.     4997.     4794.
                                          19     4335.     6520.     6185.
                                          20     4376.     7027.     6884.
                                          21     4338.     6098.     6231.
                                          22     4293.     5300.     5457.
                                          23     4248.     4553.     4752.
                                          24     4207.     3955.     4132.
                                          25     4170.     3417.     3597.
                                          26     4125.     2739.     2973.
                                          27     4070.     1955.     2270.
                                          28     4015. [illegible]     1633.
                                          29     3968.      844.     1172.
                                          30     3931.      549.      835.
                                          31     3901.      350.      576.
                                          32     3877.      214.      449.
                                          33     3854.      127.      342.
                                          34     3836.       77.      254.
                                          35     3822.       44.      185.
                                          36     3811.       24.      131.
                                          37     3802.       11.      100.
                                          38     3794.        3.      100.
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                 39     3786.         0.      100.
                 40     3777.         0.       99.
                 41     3769.         0.       99.
                 42     3761.         0.       99.
                 43     3753.         0.       99.
                 44     3745.         0.       98.
                 45     3737.         0.       98.
                 46     3729.         0.       98.
                 47     3720.         0.       98.
                 48     3712.         0.       98.
                 49     3704.         0.       97.
                 50     3696.         0.       97.

                SUM                         66774.

            PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
     CFS    6884.    5717.     2691.     1335.         66774.
  INCHES              3.07      5.79      5.98           5.98
   AC-FT             2836.     5341.     5521.          5521.
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*DVF*

                                           STATION      1

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
  1 IO        .         .         .         .         .         .         .         .         .         .         .         .
  2 .I        .         .         .         .         .         .         .         .         .         .         .         .
  3 .O I      .         .         .         .         .         .         .         .         .         .         .         .
  4 .O    I   .         .         .         .         .         .         .         .         .         .         .         .
  5 .O        .I        .         .         .         .         .         .         .         .         .         .         .
  6 .O        .      I  .         .         .         .         .         .         .         .         .         .         .
  7 .O        .         .  I      .         .         .         .         .         .         .         .         .         .
  8 .O        .         .    I    .         .         .         .         .         .         .         .         .         .
  9 .O        .         .     I   .         .         .         .         .         .         .         .         .         .
 10 .O        .         .       I .         .         .         .         .         .         .         .         .         .
 11 .O        .         .       I .         .         .         .         .         .         .         .         .         .
 12 .O        .         .        I.         .         .         .         .         .         .         .         .         .
 13 .O        .         .        I.         .         .         .         .         .         .         .         .         .
 14 .         .  O      .         .I        .         .         .         .         .         .         .         .         .
 15 .         .         .      O  .   I     .         .         .         .         .         .         .         .         .
 16 .         .         .         .    O  I .         .         .         .         .         .         .         .         .
 17 .         .         .         .         .O I      .         .         .         .         .         .         .         .
 18 .         .         .         .         .       O I         .         .         .         .         .         .         .
 19 .         .         .         .         .         .         .  O  I   .         .         .         .         .         .
 20 .         .         .         .         .         .         .        OI         .         .         .         .         .
 21 .         .         .         .         .         .         .IO       .         .         .         .         .         .
 22 .         .         .         .         .         .  I O    .         .         .         .         .         .         .
 23 .         .         .         .         .     I O .         .         .         .         .         .         .         .
 24 .         .         .         .         IO        .         .         .         .         .         .         .         .
 25 .         .         .         .   I O   .         .         .         .         .         .         .         .         .
 26 .         .         .      I  O         .         .         .         .         .         .         .         .         .
 27 .         .         I  O      .         .         .         .         .         .         .         .         .         .
 28 .         .  I  O   .         .         .         .         .         .         .         .         .         .         .
 29 .       I . O       .         .         .         .         .         .         .         .         .         .         .
 30 .    I  O .         .         .         .         .         .         .         .         .         .         .         .
 31 .  I  O   .         .         .         .         .         .         .         .         .         .         .         .
 32 . I O     .         .         .         .         .         .         .         .         .         .         .         .
 33 .I O      .         .         .         .         .         .         .         .         .         .         .         .
 34 .I O      .         .         .         .         .         .         .         .         .         .         .         .
 35 I O       .         .         .         .         .         .         .         .         .         .         .         .
 36 IO        .         .         .         .         .         .         .         .         .         .         .         .
 37 IO        .         .         .         .         .         .         .         .         .         .         .         .
 38 IO        .         .         .         .         .         .         .         .         .         .         .         .
 39 IO        .         .         .         .         .         .         .         .         .         .         .         .
 40 IO        .         .         .         .         .         .         .         .         .         .         .         .
 41 IO        .         .         .         .         .         .         .         .         .         .         .         .
 42 IO        .         .         .         .         .         .         .         .         .         .         .         .
 43 IO        .         .         .         .         .         .         .         .         .         .         .         .
 44 IO        .         .         .         .         .         .         .         .         .         .         .         .
 45 IO        .         .         .         .         .         .         .         .         .         .         .         .
 46 IO        .         .         .         .         .         .         .         .         .         .         .         .
 47 IO        .         .         .         .         .         .         .         .         .         .         .         .
 48 IO        .         .         .         .         .         .         .         .         .         .         .         .
 49 IO        .         .         .         .         .         .         .         .         .         .         .         .
 50 IO        .         .         .         .         .         .         .         .         .         .         .         .
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                                                  HYDROGRAPH ROUTING

                    ROUTE  STEVENS CREEK RESERVOIR OUTFLOW  DOWN TO  RTE 280   POINT 2

                                     ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                         2       1       0       0       0       0       1
                                                      ROUTING DATA
                                             QLOSS   CLOSS     AVG    IRES   ISAME
                                               0.0   0.000    0.00       1       0

                                     NSTPS   NSTOL     LAG   AMSKK       X     TSK   STORA
                                         0       0       0   0.000   0.000   0.000      0.

          STORAGE=        0.        50.       100.       150.       250.       380.          0.         0.         0.         0.
          OUTFLOW=        0.       500.      1500.      2500.      6500.     13000.          0.         0.         0.         0.

                                             TIME  EOP STOR    AVG IN   EOP OUT
                                                1        3.       53.       31.
                                                2        4.       53.       44.
                                                3        5.       53.       49.
                                                4        5.       54.       52.
                                                5        5.       56.       54.
                                                6        6.       59.       57.
                                                7        6.       63.       60.
                                                8        6.       68.       65.
                                                9        7.       73.       69.
                                               10        7.       79.       75.
                                               11        8.       85.       81.
                                               12        9.       91.       86.
                                               13        9.       97.       92.
                                               14       46.      715.      456.
                                               15      117.     2012.     1840.
                                               16      167.     3107.     3170.
                                               17      186.     3790.     3954.
                                               18      201.     4436.     4555.
                                               19      230.     5489.     5719.
                                               20      255.     6535.     6754.
                                               21      250.     6558.     6490.
                                               22      230.     5844.     5685.
                                               23      212.     5105.     4962.
                                               24      195.     4442.     4314.
                                               25      181.     3465.     3754.
                                               26      167.     3288.     3173.
                                               27      150.     2624.     2432.
                                               28      125.     1954.     2003.
                                               29       99.     1406.     1463.
                                               30       77.     1006.     1049.
                                               31       62.      707.      749.
                                               32       52.      513.      534.
                                               33       44.      396.      441.
                                               34       36.      298.      357.
                                               35       28.      219.      277.
                                               36       21.      158.      207.
                                               37       15.      116.      154.
                                               38       12.      100.      122.
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                      39         11.       100.       109.
                      40         10.        99.       103.
                      41         10.        99.       101.
                      42         10.        99.       100.
                      43         10.        99.        99.
                      44         10.        99.        99.
                      45         10.        98.        99.
                      46         10.        98.        98.
                      47         10.        98.        98.
                      48         10.        98.        98.
                      49         10.        97.        98.
                      50         10.        97.        97.

                     SUM                             66683.

               PEAK    6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
      CFS     6754.     5694.      2689.      1334.          66683.
   INCHES                3.06       5.78       5.98            5.98
    AC-FT               2825.      5337.      5514.           5514.
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*OVF*
                                                 STATION     2

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
       0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
       1 OI        .         .         .         .         .         .         .         .         .         .         .         .
       2 OI        .         .         .         .         .         .         .         .         .         .         .         .
       3 OI        .         .         .         .         .         .         .         .         .         .         .         .
       4 .I        .         .         .         .         .         .         .         .         .         .         .         .
       5 .I        .         .         .         .         .         .         .         .         .         .         .         .
       6 .I        .         .         .         .         .         .         .         .         .         .         .         .
       7 .I        .         .         .         .         .         .         .         .         .         .         .         .
       8 .I        .         .         .         .         .         .         .         .         .         .         .         .
       9 .I        .         .         .         .         .         .         .         .         .         .         .         .
      10 .I        .         .         .         .         .         .         .         .         .         .         .         .
      11 .I        .         .         .         .         .         .         .         .         .         .         .         .
      12 .I        .         .         .         .         .         .         .         .         .         .         .         .
      13 .I        .         .         .         .         .         .         .         .         .         .         .         .
      14 .    O I  .         .         .         .         .         .         .         .         .         .         .         .
      15 .         .       O I         .         .         .         .         .         .         .         .         .         .
      16 .         .         .         .IO       .         .         .         .         .         .         .         .         .
      17 .         .         .         .       I O         .         .         .         .         .         .         .         .
      18 .         .         .         .         .   I O   .         .         .         .         .         .         .         .
      19 .         .         .         .         .         .    I O  .         .         .         .         .         .         .
      20 .         .         .         .         .         .         .    I  O .         .         .         .         .         .
      21 .         .         .         .         .         .         .    OI   .         .         .         .         .         .
      22 .         .         .         .         .         .      OI .         .         .         .         .         .         .
      23 .         .         .         .         .         OI        .         .         .         .         .         .         .
      24 .         .         .         .         .  OI     .         .         .         .         .         .         .         .
      25 .         .         .         .       OI.         .         .         .         .         .         .         .         .
      26 .         .         .         . OI      .         .         .         .         .         .         .         .         .
      27 .         .         .    OI   .         .         .         .         .         .         .         .         .         .
      28 .         .         I         .         .         .         .         .         .         .         .         .         .
      29 .         .   IO    .         .         .         .         .         .         .         .         .         .         .
      30 .         I         .         .         .         .         .         .         .         .         .         .         .
      31 .      I  .         .         .         .         .         .         .         .         .         .         .         .
      32 .    I    .         .         .         .         .         .         .         .         .         .         .         .
      33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      34 .  IO     .         .         .         .         .         .         .         .         .         .         .         .
      35 . IO      .         .         .         .         .         .         .         .         .         .         .         .
      36 . I       .         .         .         .         .         .         .         .         .         .         .         .
      37 .IO       .         .         .         .         .         .         .         .         .         .         .         .
      38 .I        .         .         .         .         .         .         .         .         .         .         .         .
      39 .I        .         .         .         .         .         .         .         .         .         .         .         .
      40 .I        .         .         .         .         .         .         .         .         .         .         .         .
      41 .I        .         .         .         .         .         .         .         .         .         .         .         .
      42 .I        .         .         .         .         .         .         .         .         .         .         .         .
      43 .I        .         .         .         .         .         .         .         .         .         .         .         .
      44 .I        .         .         .         .         .         .         .         .         .         .         .         .
      45 .I        .         .         .         .         .         .         .         .         .         .         .         .
      46 .I        .         .         .         .         .         .         .         .         .         .         .         .
      47 .I        .         .         .         .         .         .         .         .         .         .         .         .
      48 .I        .         .         .         .         .         .         .         .         .         .         .         .
      49 .I        .         .         .         .         .         .         .         .         .         .         .         .
      50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*


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                                        SUB-AREA RUNOFF COMPUTATION

              RUNOFF HYDROGRAPH LOCAL INFLOW  AT RTE 280  (AREA B)   POINT 2

                                   ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                      2        0        0        0        0        0        1

                                                  HYDROGRAPH DATA
             IHYDG     IUHG    TAREA     SNAP    TRSDA    TRSPC    RATIO    ISNOW    ISAME    LOCAL
                 0        0     3.60     0.00     0.00     0.00    0.000        0        0        0

                                                    PRECIP DATA
                                            NP   STORM     DAJ     DAK
                                            24    7.01    0.00    0.00
                                                  PRECIP PATTERN
         1.61       2.42       2.10       3.39       4.19       3.71       3.23       3.71       3.87       3.39
         3.39       3.71       3.87       5.64       4.19       6.61       6.29      11.77       4.67       4.36
         3.71       3.39       3.55       3.23

                                                     LOSS DATA
            STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
            0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.090    0.000    0.150

                                                UNIT HYDROGRAPH DATA
                                       TC=  1.50      R=  1.20     NTA=  0

                                                   RECESSION DATA
                                 STRTQ=     0.00     QRCSN=     0.00     RTIOR= 1.00

              UNIT HYDROGRAPH  7 END-OF-PERIOD ORDINATES, LAG=   1.38 HOURS, CP= 0.60  VOL= 1.00
         497.       888.       551.       227.        93.        38.        16.

                                                END-OF-PERIOD FLOW
                                          TIME   RAIN   EXCS     COMP Q
                                             1 0.1129 0.0364        18.
                                             2 0.1696 0.0931        79.
                                             3 0.1472 0.0707       138.
                                             4 0.2376 0.1611       202.
                                             5 0.2937 0.2172       315.
                                             6 0.2601 0.1836       399.
                                             7 0.2264 0.1499       405.
                                             8 0.2601 0.1836       394.
                                             9 0.2713 0.1948       412.
                                            10 0.2376 0.1611       416.
                                            11 0.2376 0.1611       397.
                                            12 0.2601 0.1836       393.
                                            13 0.2713 0.1948       413.
                                            14 0.3954 0.3189       495.
                                            15 0.2937 0.2172       564.
                                            16 0.4634 0.3869       631.
                                            17 0.4409 0.3644       745.
                                            18 0.8251 0.7436       998.
                                            19 0.3274 0.2509      1114.
                                            20 0.3056 0.2291       882.
                                            21 0.2601 0.1836       655.
```

```
                    22 0.2376 0.1611        516.
                    23 0.2489 0.1724        440.
                    24 0.2264 0.1499        401.
                    25 0.0000 0.0000        295.
                    26 0.0000 0.0000        148.
                    27 0.0000 0.0000         59.
                    28 0.0000 0.0000         23.
                    29 0.0000 0.0000          9.
                    30 0.0000 0.0000          2.
                    31 0.0000 0.0000          0.
                    32 0.0000 0.0000          0.
                    33 0.0000 0.0000          0.
                    34 0.0000 0.0000          0.
                    35 0.0000 0.0000          0.
                    36 0.0000 0.0000          0.
                    37 0.0000 0.0000          0.
                    38 0.0000 0.0000          0.
                    39 0.0000 0.0000          0.
                    40 0.0000 0.0000          0.
                    41 0.0000 0.0000          0.
                    42 0.0000 0.0000          0.
                    43 0.0000 0.0000          0.
                    44 0.0000 0.0000          0.
                    45 0.0000 0.0000          0.
                    46 0.0000 0.0000          0.
                    47 0.0000 0.0000          0.
                    48 0.0000 0.0000          0.
                    49 0.0000 0.0000          0.
                    50 0.0000 0.0000          0.

                   SUM   7.03   5.15      11958.

               PEAK     6-HOUR    24-HOUR    72-HOUR    TOTAL VOLUME
     CFS      1114.       837.       490.       239.         11957.
  INCHES                  2.16       5.07       5.15           5.15
   AC-FT                  415.       973.       989.           989.
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*OVF*
                                                STATION      2

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
       0.      200.      400.      600.      800.     1000.     1200.        0.        0.        0.        0.        0.        0.
                                                                                                       PRECIP(L) AND EXCESS(X)
      0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
       1 .I        .         .         .         .         .         .         .         .         .         .         .      LLXX
       2 .   I     .         .         .         .         .         .         .         .         .         .         .     LLXXX
       3 .      I  .         .         .         .         .         .         .         .         .         .         .     LLXXX
       4 .         I         .         .         .         .         .         .         .         .         .         .   LLXXXXX
       5 .         .     I   .         .         .         .         .         .         .         .         .         .  LLXXXXXX
       6 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
       7 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
       8 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
       9 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
      10 .         .         .I        .         .         .         .         .         .         .         .         .   LLXXXXX
      11 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
      12 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
      13 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
      14 .         .         .    I    .         .         .         .         .         .         .         .         LLXXXXXXXXX
      15 .         .         .       I .         .         .         .         .         .         .         .         .  LLXXXXXX
      16 .         .         .         . I       .         .         .         .         .         .         .       LLXXXXXXXXXXX
      17 .         .         .         .      I  .         .         .         .         .         .         .        LLXXXXXXXXXX
      18 .         .         .         .         .         I         .         .         .         .        LLXXXXXXXXXXXXXXXXXXXX
      19 .         .         .         .         .         .     I   .         .         .         .         .         . LLXXXXXXX
      20 .         .         .         .         .   I     .         .         .         .         .         .         . LLXXXXXXX
      21 .         .         .         .  I      .         .         .         .         .         .         .         .  LLXXXXXX
      22 .         .         .     I   .         .         .         .         .         .         .         .         .   LLXXXXX
      23 .         .         . I       .         .         .         .         .         .         .         .         .   LLXXXXX
      24 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
      25 .         .    I    .         .         .         .         .         .         .         .         .         .         L
      26 .      I  .         .         .         .         .         .         .         .         .         .         .         L
      27 .  I      .         .         .         .         .         .         .         .         .         .         .         L
      28 .I        .         .         .         .         .         .         .         .         .         .         .         L
      29 I         .         .         .         .         .         .         .         .         .         .         .         L
      30 I         .         .         .         .         .         .         .         .         .         .         .         L
      31 I         .         .         .         .         .         .         .         .         .         .         .         L
      32 I         .         .         .         .         .         .         .         .         .         .         .         L
      33 I         .         .         .         .         .         .         .         .         .         .         .         L
      34 I         .         .         .         .         .         .         .         .         .         .         .         L
      35 I         .         .         .         .         .         .         .         .         .         .         .         L
      36 I         .         .         .         .         .         .         .         .         .         .         .         L
      37 I         .         .         .         .         .         .         .         .         .         .         .         L
      38 I         .         .         .         .         .         .         .         .         .         .         .         L
      39 I         .         .         .         .         .         .         .         .         .         .         .         L
      40 I         .         .         .         .         .         .         .         .         .         .         .         L
      41 I         .         .         .         .         .         .         .         .         .         .         .         L
      42 I         .         .         .         .         .         .         .         .         .         .         .         L
      43 I         .         .         .         .         .         .         .         .         .         .         .         L
      44 I         .         .         .         .         .         .         .         .         .         .         .         L
      45 I         .         .         .         .         .         .         .         .         .         .         .         L
      46 I         .         .         .         .         .         .         .         .         .         .         .         L
      47 I         .         .         .         .         .         .         .         .         .         .         .         L
      48 I         .         .         .         .         .         .         .         .         .         .         .         L
      49 I         .         .         .         .         .         .         .         .         .         .         .         L
      50 I         .         .         .         .         .         .         .         .         .         .         .         L
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 *DVN*


               **********          **********          **********          **********          **********

                                                      HYDROGRAPH BALANCE

                        BALANCED HYDROGRAPH LOCAL INFLOW   AT  RTE 280  (AREA B)  POINT 2

                                            ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                                2       88        0        0        0        0        1

                  BALANCE DESIRED      1      1093.     24     10987.       0         0.       0         0.       0         0.
               BALANCE RESULTS             1093.             10987.               0.                 0.                 0.

   NUMBER OF ITERATIONS=  1

                                                       END-OF-PERIOD FLOWS AT      2
                                                               SUM=     11163.
                     15.         73.        12[illegible].       188.        292.        371.        376.        366.        382.        387.
                    368.        365.        383.        459.        524.        536.        691.        927.       1093.        819.
                    609.        480.        409.        372.        274.        137.         55.         22.          8.          2.
                      0.          0.          0.          0.          0.          0.          0.          0.          0.          0.
                      0.          0.          0.          0.          0.          0.          0.          0.          0.          0.

                                                 PEAK     6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
                                        CFS     1093.       788.       458.       223.         11163.
                                     INCHES                 2.03       4.73       4.81           4.81
                                      AC-FT                 391.       908.       923.           923.
```

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*OVF*
                                                  STATION     2

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.      100.      200.      300.      400.      500.      600.      700.      800.      900.     1000.     1100.        0.
        1 . I       .         .         .         .         .         .         .         .         .         .         .         .
        2 .      I  .         .         .         .         .         .         .         .         .         .         .         .
        3 .         .  I      .         .         .         .         .         .         .         .         .         .         .
        4 .         .        I.         .         .         .         .         .         .         .         .         .         .
        5 .         .         .        I.         .         .         .         .         .         .         .         .         .
        6 .         .         .         .      I  .         .         .         .         .         .         .         .         .
        7 .         .         .         .       I .         .         .         .         .         .         .         .         .
        8 .         .         .         .      I  .         .         .         .         .         .         .         .         .
        9 .         .         .         .       I .         .         .         .         .         .         .         .         .
       10 .         .         .         .        I.         .         .         .         .         .         .         .         .
       11 .         .         .         .      I  .         .         .         .         .         .         .         .         .
       12 .         .         .         .      I  .         .         .         .         .         .         .         .         .
       13 .         .         .         .       I .         .         .         .         .         .         .         .         .
       14 .         .         .         .         .     I   .         .         .         .         .         .         .         .
       15 .         .         .         .         .         . I       .         .         .         .         .         .         .
       16 .         .         .         .         .         .        I.         .         .         .         .         .         .
       17 .         .         .         .         .         .         .        I.         .         .         .         .         .
       18 .         .         .         .         .         .         .         .         .         .  I      .         .         .
       19 .         .         .         .         .         .         .         .         .         .         .        I.         .
       20 .         .         .         .         .         .         .         .         . I       .         .         .         .
       21 .         .         .         .         .         .         .I        .         .         .         .         .         .
       22 .         .         .         .         .       I .         .         .         .         .         .         .         .
       23 .         .         .         .         .I        .         .         .         .         .         .         .         .
       24 .         .         .         .      I  .         .         .         .         .         .         .         .         .
       25 .         .         .      I  .         .         .         .         .         .         .         .         .         .
       26 .         .   I     .         .         .         .         .         .         .         .         .         .         .
       27 .     I   .         .         .         .         .         .         .         .         .         .         .         .
       28 . I       .         .         .         .         .         .         .         .         .         .         .         .
       29 .I        .         .         .         .         .         .         .         .         .         .         .         .
       30 I         .         .         .         .         .         .         .         .         .         .         .         .
       31 I         .         .         .         .         .         .         .         .         .         .         .         .
       32 I         .         .         .         .         .         .         .         .         .         .         .         .
       33 I         .         .         .         .         .         .         .         .         .         .         .         .
       34 I         .         .         .         .         .         .         .         .         .         .         .         .
       35 I         .         .         .         .         .         .         .         .         .         .         .         .
       36 I         .         .         .         .         .         .         .         .         .         .         .         .
       37 I         .         .         .         .         .         .         .         .         .         .         .         .
       38 I         .         .         .         .         .         .         .         .         .         .         .         .
       39 I         .         .         .         .         .         .         .         .         .         .         .         .
       40 I         .         .         .         .         .         .         .         .         .         .         .         .
       41 I         .         .         .         .         .         .         .         .         .         .         .         .
       42 I         .         .         .         .         .         .         .         .         .         .         .         .
       43 I         .         .         .         .         .         .         .         .         .         .         .         .
       44 I         .         .         .         .         .         .         .         .         .         .         .         .
       45 I         .         .         .         .         .         .         .         .         .         .         .         .
       46 I         .         .         .         .         .         .         .         .         .         .         .         .
       47 I         .         .         .         .         .         .         .         .         .         .         .         .
       48 I         .         .         .         .         .         .         .         .         .         .         .         .
       49 I         .         .         .         .         .         .         .         .         .         .         .         .
       50 I         .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*


          **********          **********          **********          **********          **********

                                                  COMBINE HYDROGRAPHS

                  COMBINE LOCAL INFLOW (AREA B) WITH FLOW ROUTED FROM  RESERVOIR   AT POINT 2

                                        ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                            2       2       0       0       0       0       1


                                                SUM OF 2 HYDROGRAPHS AT      2
      46.      117.      177.      240.      346.      427.      436.      431.      452.      462.
     449.      452.      476.      916.     2365.     3756.     4646.     5482.     6812.     7573.
    7099.     6165.     5370.     4686.     4023.     3310.     2547.     2027.     1471.     1051.
     740.      534.      441.      357.      277.      207.      154.      122.      109.      103.
     101.      100.       99.       99.       99.       99.       98.       98.       98.       97.

                                             PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                   CFS      7573.     6417.     3036.     1557.         77846.
                                INCHES                 2.86      5.41      5.77           5.77
                                 AC-FT                3184.     6025.     6437.          6437.
```

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*OVF*
                                             STATION     2

                        INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
    0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.     0.        0.        0.        0.
   1 I         .         .         .         .         .         .         .         .         .         .         .         .
   2 .I        .         .         .         .         .         .         .         .         .         .         .         .
   3 . I       .         .         .         .         .         .         .         .         .         .         .         .
   4 . I       .         .         .         .         .         .         .         .         .         .         .         .
   5 .  I      .         .         .         .         .         .         .         .         .         .         .         .
   6 .   I     .         .         .         .         .         .         .         .         .         .         .         .
   7 .   I     .         .         .         .         .         .         .         .         .         .         .         .
   8 .   I     .         .         .         .         .         .         .         .         .         .         .         .
   9 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  10 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  11 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  12 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  13 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  14 .        I.         .         .         .         .         .         .         .         .         .         .         .
  15 .         .         .   I     .         .         .         .         .         .         .         .         .         .
  16 .         .         .         .       I .         .         .         .         .         .         .         .         .
  17 .         .         .         .         .     I   .         .         .         .         .         .         .         .
  18 .         .         .         .         .         .    I    .         .         .         .         .         .         .
  19 .         .         .         .         .         .         .       I .         .         .         .         .         .
  20 .         .         .         .         .         .         .         .     I   .         .         .         .         .
  21 .         .         .         .         .         .         .         .I        .         .         .         .         .
  22 .         .         .         .         .         .         . I       .         .         .         .         .         .
  23 .         .         .         .         .         .    I    .         .         .         .         .         .         .
  24 .         .         .         .         .      I  .         .         .         .         .         .         .         .
  25 .         .         .         .         I         .         .         .         .         .         .         .         .
  26 .         .         .         .  I      .         .         .         .         .         .         .         .         .
  27 .         .         .    I    .         .         .         .         .         .         .         .         .         .
  28 .         .         I         .         .         .         .         .         .         .         .         .         .
  29 .         .    I    .         .         .         .         .         .         .         .         .         .         .
  30 .         .I        .         .         .         .         .         .         .         .         .         .         .
  31 .      I  .         .         .         .         .         .         .         .         .         .         .         .
  32 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  34 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  35 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  36 . I       .         .         .         .         .         .         .         .         .         .         .         .
  37 . I       .         .         .         .         .         .         .         .         .         .         .         .
  38 .I        .         .         .         .         .         .         .         .         .         .         .         .
  39 .I        .         .         .         .         .         .         .         .         .         .         .         .
  40 .I        .         .         .         .         .         .         .         .         .         .         .         .
  41 .I        .         .         .         .         .         .         .         .         .         .         .         .
  42 .I        .         .         .         .         .         .         .         .         .         .         .         .
  43 .I        .         .         .         .         .         .         .         .         .         .         .         .
  44 .I        .         .         .         .         .         .         .         .         .         .         .         .
  45 .I        .         .         .         .         .         .         .         .         .         .         .         .
  46 .I        .         .         .         .         .         .         .         .         .         .         .         .
  47 .I        .         .         .         .         .         .         .         .         .         .         .         .
  48 .I        .         .         .         .         .         .         .         .         .         .         .         .
  49 .I        .         .         .         .         .         .         .         .         .         .         .         .
  50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

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                                   RUNOFF SUMMARY, AVERAGE FLOW

                                     PEAK     6-HOUR     24-HOUR    72-HOUR       AREA
HYDROGRAPH AT               1        7563.     5775.       3591.      1745.      17.30
ROUTED TO                   1        6884.     5717.       2691.      1335.      17.30
ROUTED TO                   2        6754.     5694.       2689.      1334.      17.30
HYDROGRAPH AT               2        1094.      789.        459.       223.       3.60
ROUTED TO                   2        1093.      783.        459.       223.       3.60
 2 COMBINED                 2        7573.     6417.       3036.      1557.      20.90
```

2 - C

RESERVOIR EMPTY 0 AF

(adjusted inflow volume)

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******************************
HEC-1 VERSION DATED JAN 1973
UPDATED AUG 74
CHANGE NO. 01
******************************
                 STEVENS CREEK  HYDROLOGY   100 YEAR  FLOOD HYDROGRAPHS

                                        JOB SPECIFICATION
                         NQ    NHR   NMIN  IDAY   IHR  IMIN METRC   IPLT  IPRT NSTAN
                         50      1      0     0     0     0     0      2     0     0
                                           JOPER     NWT
                                              3        0


             **********          **********          **********          **********          **********

                                      SUB-AREA RUNOFF COMPUTATION

                 RUNOFF HYDROGRAPH  INFLOW TO RESERVOIR   (AREA A)      POINT 1

                             ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                 1        0        0        0        0        0        1

                                          HYDROGRAPH DATA
                  IHYDG     IUHG    TAREA     SNAP    TRSDA    TRSPC    RATIO    ISNOW    ISAME    LOCAL
                      0        0    17.30     0.00     0.00     0.00    0.000        0        0        0

                                            PRECIP DATA
                                        NP    STORM     DAJ      DAK
                                        24    10.18     0.00     0.00
                                           PRECIP PATTERN
        1.66      2.32      2.16      3.49      4.32      3.66      3.32      3.82      3.82      3.49
        3.49      3.82      3.98      5.82      4.16      6.32      6.15     10.96      4.65      4.47
        3.82      3.49      3.49      3.32

                                              LOSS DATA
                 STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
                 0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.130    0.000    0.000

                                         UNIT HYDROGRAPH DATA
                                     TC=  2.30      R=  2.40     NTA=   6

                                      UNIT GRAPH TIME-AREA ORDINATES
        0.15      3.18      6.70     10.55     15.00     17.30

                                           RECESSION DATA
                              STRTQ=     0.00     QRCSN=     0.00     RTIOR= 1.00

                UNIT HYDROGRAPH 14 END-OF-PERIOD ORDINATES, LAG=    2.06 HOURS, CP= 0.52   VOL= 1.00
       820.      2294.     2607.     1875.     1228.      805.      527.      345.      226.      148.
        97.        64.       42.       27.

                                          END-OF-PERIOD FLOW
                                       TIME   RAIN    EXCS     COMP Q
                                          1 0.1690 0.0390        32.
                                          2 0.2362 0.1062       176.
                                          3 0.2199 0.0899       619.
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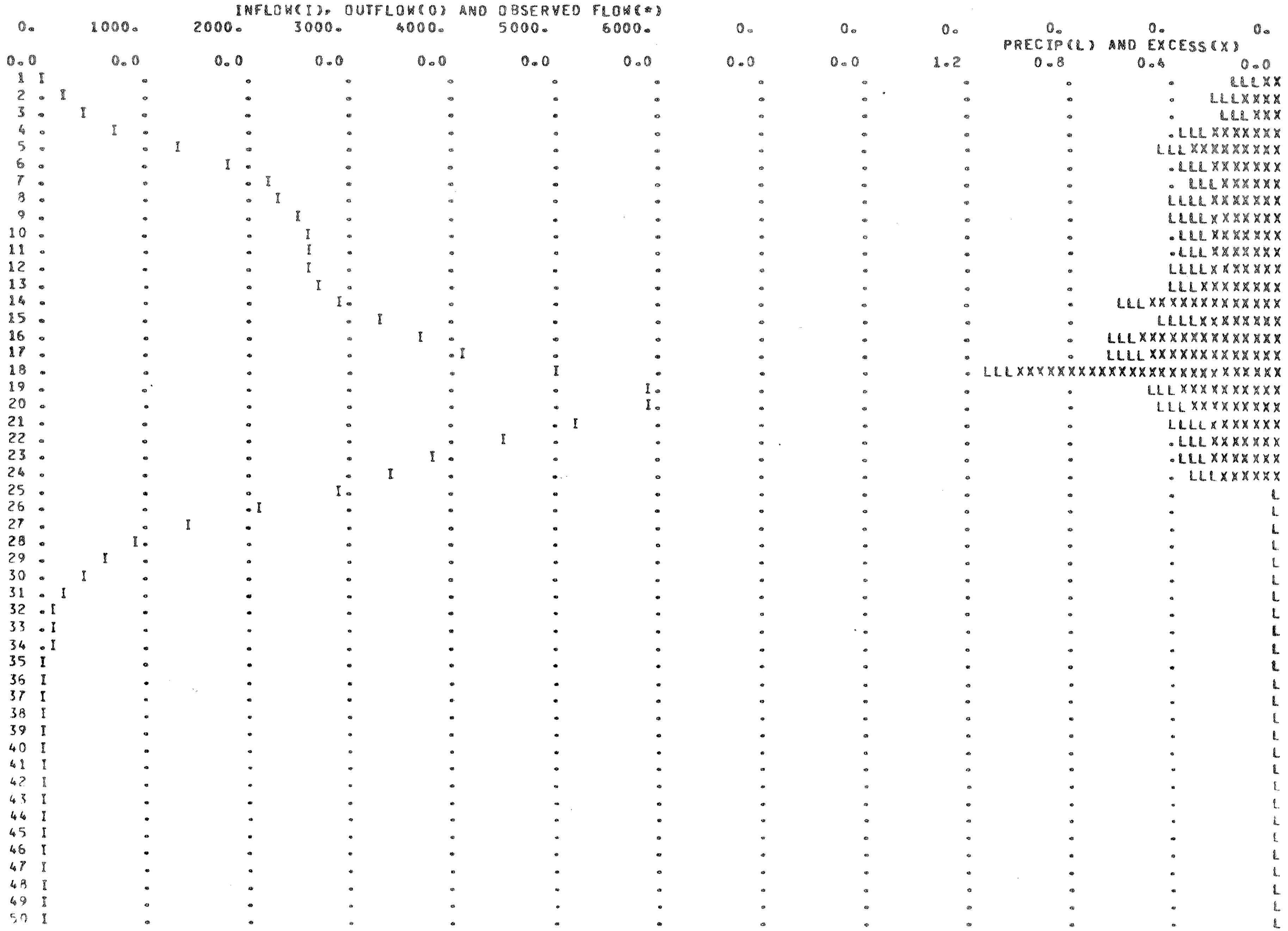
```
                   4 0.3553 0.2253       741.
                   5 0.4398 0.3098      1252.
                   6 0.3726 0.2426      1827.
                   7 0.3380 0.2080      2173.
                   8 0.3889 0.2589      2321.
                   9 0.3889 0.2589      2458.
                  10 0.3553 0.2253      2570.
                  11 0.3553 0.2253      2594.
                  12 0.3889 0.2589      2599.
                  13 0.4052 0.2752      2670.
                  14 0.5925 0.4625      2935.
                  15 0.4235 0.2935      3322.
                  16 0.6434 0.5134      3668.
                  17 0.6261 0.4961      4111.
                  18 1.1157 0.9857      4985.
                  19 0.4734 0.3434      5907.
                  20 0.4550 0.3250      5907.
                  21 0.3889 0.2589      5193.
                  22 0.3553 0.2253      4454.
                  23 0.3553 0.2253      3834.
                  24 0.3380 0.2080      3366.
                  25 0.0000 0.0000      2853.
                  26 0.0000 0.0000      2132.
                  27 0.0000 0.0000      1427.
                  28 0.0000 0.0000       926.
                  29 0.0000 0.0000       602.
                  30 0.0000 0.0000       385.
                  31 0.0000 0.0000       243.
                  32 0.0000 0.0000       142.
                  33 0.0000 0.0000        87.
                  34 0.0000 0.0000        51.
                  35 0.0000 0.0000        29.
                  36 0.0000 0.0000        15.
                  37 0.0000 0.0000         6.
                  38 0.0000 0.0000         0.
                  39 0.0000 0.0000         0.
                  40 0.0000 0.0000         0.
                  41 0.0000 0.0000         0.
                  42 0.0000 0.0000         0.
                  43 0.0000 0.0000         0.
                  44 0.0000 0.0000         0.
                  45 0.0000 0.0000         0.
                  46 0.0000 0.0000         0.
                  47 0.0000 0.0000         0.
                  48 0.0000 0.0000         0.
                  49 0.0000 0.0000         0.
                  50 0.0000 0.0000         0.

                 SUM  10.22   7.10     78412.

              PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
     CFS     5907.     5093.     3145.     1568.         78412.
  INCHES                2.74      6.76      7.03           7.03
   AC-FT               2527.     6242.     6484.          6484.
```

OVF

STATION 1



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*OVN*


              ****** ****          **********          **********          **********          **********

                                                 HYDROGRAPH BALANCE

                   BALANCED HYDROGRAPH INFLOW TO  RESERVOIR    AREA A

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                      1      88       0       0       0       0       1

            BALANCE DESIRED      1     7563.     24    84012.      0        0.      0        0.      0        0.
         BALANCE RESULTS           7563.          84012.              0.               0.               0.

NUMBER OF ITERATIONS=  2

                                                END-OF-PERIOD FLOWS AT      1
                                                       SUM=    87263.
                 29.      196.      466.      824.     1376.     2008.     2388.     2550.     2701.     2824.
               2850.     2856.     2933.     3225.     3651.     4030.     4517.     5477.     7563.     6490.
               5706.     4893.     4212.     3698.     3135.     2342.     1567.     1018.      670.      428.
                271.      158.       97.       57.       32.       17.        6.        0.        0.        0.
                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.

                                             PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                   CFS      7563.     5775.     3501.     1745.         87263.
                                INCHES                 3.11      7.53      7.82           7.82
                                 AC-FT                2865.     6947.     7216.          7216.
```

```
   *OVF*
                                                    STATION     1

                               INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
          0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
          1 I         .         .         .         .         .         .         .         .         .         .         .         .
          2 . I       .         .         .         .         .         .         .         .         .         .         .         .
          3 .    I    .         .         .         .         .         .         .         .         .         .         .         .
          4 .       I .         .         .         .         .         .         .         .         .         .         .         .
          5 .         .   I     .         .         .         .         .         .         .         .         .         .         .
          6 .         .         I         .         .         .         .         .         .         .         .         .         .
          7 .         .         .   I     .         .         .         .         .         .         .         .         .         .
          8 .         .         .     I   .         .         .         .         .         .         .         .         .         .
          9 .         .         .      I  .         .         .         .         .         .         .         .         .         .
         10 .         .         .       I .         .         .         .         .         .         .         .         .         .
         11 .         .         .       I .         .         .         .         .         .         .         .         .         .
         12 .         .         .        I.         .         .         .         .         .         .         .         .         .
         13 .         .         .        I.         .         .         .         .         .         .         .         .         .
         14 .         .         .         . I       .         .         .         .         .         .         .         .         .
         15 .         .         .         .      I  .         .         .         .         .         .         .         .         .
         16 .         .         .         .         I         .         .         .         .         .         .         .         .
         17 .         .         .         .         .    I    .         .         .         .         .         .         .         .
         18 .         .         .         .         .         .    I    .         .         .         .         .         .         .
         19 .         .         .         .         .         .         .         .     I   .         .         .         .         .
         20 .         .         .         .         .         .         .    I    .         .         .         .         .         .
         21 .         .         .         .         .         .      I  .         .         .         .         .         .         .
         22 .         .         .         .         .        I.         .         .         .         .         .         .         .
         23 .         .         .         .         . I       .         .         .         .         .         .         .         .
         24 .         .         .         .      I  .         .         .         .         .         .         .         .         .
         25 .         .         .         .I        .         .         .         .         .         .         .         .         .
         26 .         .         .  I      .         .         .         .         .         .         .         .         .         .
         27 .         .     I   .         .         .         .         .         .         .         .         .         .         .
         28 .         I         .         .         .         .         .         .         .         .         .         .         .
         29 .      I  .         .         .         .         .         .         .         .         .         .         .         .
         30 .   I     .         .         .         .         .         .         .         .         .         .         .         .
         31 .  I      .         .         .         .         .         .         .         .         .         .         .         .
         32 . I       .         .         .         .         .         .         .         .         .         .         .         .
         33 .I        .         .         .         .         .         .         .         .         .         .         .         .
         34 .I        .         .         .         .         .         .         .         .         .         .         .         .
         35 I         .         .         .         .         .         .         .         .         .         .         .         .
         36 I         .         .         .         .         .         .         .         .         .         .         .         .
         37 I         .         .         .         .         .         .         .         .         .         .         .         .
         38 I         .         .         .         .         .         .         .         .         .         .         .         .
         39 I         .         .         .         .         .         .         .         .         .         .         .         .
         40 I         .         .         .         .         .         .         .         .         .         .         .         .
         41 I         .         .         .         .         .         .         .         .         .         .         .         .
         42 I         .         .         .         .         .         .         .         .         .         .         .         .
         43 I         .         .         .         .         .         .         .         .         .         .         .         .
         44 I         .         .         .         .         .         .         .         .         .         .         .         .
         45 I         .         .         .         .         .         .         .         .         .         .         .         .
         46 I         .         .         .         .         .         .         .         .         .         .         .         .
         47 I         .         .         .         .         .         .         .         .         .         .         .         .
         48 I         .         .         .         .         .         .         .         .         .         .         .         .
         49 I         .         .         .         .         .         .         .         .         .         .         .         .
         50 I         .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*



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                                          HYDROGRAPH ROUTING

              ROUTE FLOW  THRU RESERVOIR   POINT 1

                            ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                1        1        0        0        0        0        1
                                               ROUTING DATA
                                     QLOSS    CLOSS      AVG     IRES    ISAME
                                       0.0    0.000     0.00        1        0

                            NSTPS    NSTDL      LAG    AMSKK        X      TSK    STORA
                                0        0        0    0.000    0.000    0.000       0.

      STORAGE=        0.      3804.     3899.     3995.     4092.     4191.     4292.     4394.     4498.     4604.
      OUTFLOW=        0.       100.      557.     1408.     2529.     3880.     5438.     7192.     9127.    11243.

                                     TIME  EOP STOR    AVG IN   EOP OUT
                                        1        2.       29.        0.
                                        2       12.      113.        0.
                                        3       39.      331.        1.
                                        4       92.      645.        2.
                                        5      183.     1100.        5.
                                        6      322.     1692.        8.
                                        7      503.     2198.       13.
                                        8      706.     2469.       19.
                                        9      921.     2626.       24.
                                       10     1147.     2762.       30.
                                       11     1379.     2837.       36.
                                       12     1611.     2853.       42.
                                       13     1847.     2895.       49.
                                       14     2097.     3079.       55.
                                       15     2376.     3439.       62.
                                       16     2688.     3940.       71.
                                       17     3035.     4274.       80.
                                       18     3441.     4997.       90.
                                       19     3938.     6520.      907.
                                       20     4271.     7027.     5108.
                                       21     4319.     6098.     5909.
                                       22     4290.     5300.     5405.
                                       23     4247.     4553.     4742.
                                       24     4207.     3955.     4129.
                                       25     4170.     3417.     3597.
                                       26     4125.     2739.     2978.
                                       27     4070.     1955.     2270.
                                       28     4015.     1293.     1639.
                                       29     3968.      844.     1173.
                                       30     3931.      549.      839.
                                       31     3901.      350.      576.
                                       32     3877.      214.      449.
                                       33     3854.      127.      342.
                                       34     3836.       77.      254.
                                       35     3822.       44.      185.
                                       36     3811.       24.      131.
                                       37     3802.       11.      100.
                                       38     3794.        3.      100.
```

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                          39      3786.        0.      100.
                          40      3777.        0.       99.
                          41      3769.        0.       99.
                          42      3761.        0.       99.
                          43      3753.        0.       99.
                          44      3745.        0.       98.
                          45      3737.        0.       98.
                          46      3729.        0.       98.
                          47      3720.        0.       98.
                          48      3712.        0.       98.
                          49      3704.        0.       97.
                          50      3696.        0.       97.

                         SUM                         42601.

                    PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
         CFS       5909.     4815.     1718.      852.         42601.
      INCHES                  2.59      3.69      3.82           3.82
       AC-FT                 2389.     3409.     3523.          3523.
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*OVF*
                                           STATION      1

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 OI        .         .         .         .         .         .         .         .         .         .         .         .
  3 O  I      .         .         .         .         .         .         .         .         .         .         .         .
  4 O     I   .         .         .         .         .         .         .         .         .         .         .         .
  5 O         .I        .         .         .         .         .         .         .         .         .         .         .
  6 O         .      I  .         .         .         .         .         .         .         .         .         .         .
  7 O         .         . I       .         .         .         .         .         .         .         .         .         .
  8 O         .         .    I    .         .         .         .         .         .         .         .         .         .
  9 O         .         .     I   .         .         .         .         .         .         .         .         .         .
 10 O         .         .       I .         .         .         .         .         .         .         .         .         .
 11 O         .         .       I .         .         .         .         .         .         .         .         .         .
 12 O         .         .        I.         .         .         .         .         .         .         .         .         .
 13 O         .         .        I.         .         .         .         .         .         .         .         .         .
 14 .O        .         .         .I        .         .         .         .         .         .         .         .         .
 15 .O        .         .         .   I     .         .         .         .         .         .         .         .         .
 16 .O        .         .         .       I .         .         .         .         .         .         .         .         .
 17 .O        .         .         .         .  I      .         .         .         .         .         .         .         .
 18 .O        .         .         .         .         I         .         .         .         .         .         .         .
 19 .        O.         .         .         .         .         .    I    .         .         .         .         .         .
 20 .         .         .         .         .         .O        .         I         .         .         .         .         .
 21 .         .         .         .         .         .        O.I        .         .         .         .         .         .
 22 .         .         .         .         .         .  IO     .         .         .         .         .         .         .
 23 .         .         .         .         .     IO  .         .         .         .         .         .         .         .
 24 .         .         .         .         IO        .         .         .         .         .         .         .         .
 25 .         .         .         .   I O   .         .         .         .         .         .         .         .         .
 26 .         .         .      I  O         .         .         .         .         .         .         .         .         .
 27 .         .         I  O      .         .         .         .         .         .         .         .         .         .
 28 .         .  I  O   .         .         .         .         .         .         .         .         .         .         .
 29 .       I . O       .         .         .         .         .         .         .         .         .         .         .
 30 .    I  O .         .         .         .         .         .         .         .         .         .         .         .
 31 .  I  O   .         .         .         .         .         .         .         .         .         .         .         .
 32 . I O     .         .         .         .         .         .         .         .         .         .         .         .
 33 .I O      .         .         .         .         .         .         .         .         .         .         .         .
 34 .I O      .         .         .         .         .         .         .         .         .         .         .         .
 35 I O       .         .         .         .         .         .         .         .         .         .         .         .
 36 IO        .         .         .         .         .         .         .         .         .         .         .         .
 37 IO        .         .         .         .         .         .         .         .         .         .         .         .
 38 IO        .         .         .         .         .         .         .         .         .         .         .         .
 39 IO        .         .         .         .         .         .         .         .         .         .         .         .
 40 IO        .         .         .         .         .         .         .         .         .         .         .         .
 41 IO        .         .         .         .         .         .         .         .         .         .         .         .
 42 IO        .         .         .         .         .         .         .         .         .         .         .         .
 43 IO        .         .         .         .         .         .         .         .         .         .         .         .
 44 IO        .         .         .         .         .         .         .         .         .         .         .         .
 45 IO        .         .         .         .         .         .         .         .         .         .         .         .
 46 IO        .         .         .         .         .         .         .         .         .         .         .         .
 47 IO        .         .         .         .         .         .         .         .         .         .         .         .
 48 IO        .         .         .         .         .         .         .         .         .         .         .         .
 49 IO        .         .         .         .         .         .         .         .         .         .         .         .
 50 IO        .         .         .         .         .         .         .         .         .         .         .         .
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                                                  HYDROGRAPH ROUTING

                      ROUTE  STEVENS CREEK RESERVOIR OUTFLOW  DOWN TO  RTE 280    POINT 2

                                      ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                          2       1       0       0       0       0       1
                                                        ROUTING DATA
                                              QLOSS   CLOSS     AVG    IRES   ISAME
                                                0.0   0.000    0.00       1       0

                                      NSTPS   NSTDL     LAG   AMSKK       X     TSK   STORA
                                          0       0       0   0.000   0.000   0.000      0.

         STORAGE=         0.        50.      100.       150.      250.      380.         0.         0.         0.         0.
         OUTFLOW=         0.       500.     1500.      2500.     6500.    13000.         0.         0.         0.         0.

                                              TIME  EOP STOR    AVG IN   EOP OUT
                                                 1        0.        0.        0.
                                                 2        0.        0.        0.
                                                 3        0.        1.        0.
                                                 4        0.        2.        1.
                                                 5        0.        4.        3.
                                                 6        0.        7.        5.
                                                 7        1.       11.        8.
                                                 8        1.       16.       13.
                                                 9        2.       21.       18.
                                                10        2.       27.       23.
                                                11        3.       33.       29.
                                                12        4.       39.       35.
                                                13        4.       45.       41.
                                                14        5.       52.       47.
                                                15        5.       59.       54.
                                                16        6.       67.       61.
                                                17        7.       75.       69.
                                                18        8.       85.       79.
                                                19       32.      499.      324.
                                                20      155.     3008.     2715.
                                                21      242.     5508.     6196.
                                                22      226.     5657.     5524.
                                                23      212.     5073.     4962.
                                                24      195.     4436.     4306.
                                                25      181.     3863.     3754.
                                                26      167.     3287.     3173.
                                                27      150.     2624.     2492.
                                                28      125.     1954.     2005.
                                                29       98.     1406.     1463.
                                                30       77.     1006.     1049.
                                                31       62.      707.      740.
                                                32       52.      513.      534.
                                                33       44.      396.      441.
                                                34       36.      298.      357.
                                                35       28.      219.      277.
                                                36       21.      158.      207.
                                                37       15.      116.      154.
                                                38       12.      100.      122.
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                39       11.      100.      109.
                40       10.       99.      103.
                41       10.       99.      101.
                42       10.       99.      100.
                43       10.       99.       99.
                44       10.       99.       99.
                45       10.       98.       99.
                46       10.       98.       98.
                47       10.       98.       98.
                48       10.       98.       98.
                49       10.       97.       98.
                50       10.       97.       97.

               SUM                        42483.

            PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
   CFS     6196.     4653.     1717.      850.         42483.
INCHES                2.50      3.69      3.81           3.81
 AC-FT               2308.     3407.     3513.          3513.
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*OVF*
                                            STATION      2

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 I         .         .         .         .         .         .         .         .         .         .         .         .
  3 I         .         .         .         .         .         .         .         .         .         .         .         .
  4 I         .         .         .         .         .         .         .         .         .         .         .         .
  5 I         .         .         .         .         .         .         .         .         .         .         .         .
  6 I         .         .         .         .         .         .         .         .         .         .         .         .
  7 I         .         .         .         .         .         .         .         .         .         .         .         .
  8 I         .         .         .         .         .         .         .         .         .         .         .         .
  9 I         .         .         .         .         .         .         .         .         .         .         .         .
 10 I         .         .         .         .         .         .         .         .         .         .         .         .
 11 I         .         .         .         .         .         .         .         .         .         .         .         .
 12 I         .         .         .         .         .         .         .         .         .         .         .         .
 13 I         .         .         .         .         .         .         .         .         .         .         .         .
 14 OI        .         .         .         .         .         .         .         .         .         .         .         .
 15 .I        .         .         .         .         .         .         .         .         .         .         .         .
 16 .I        .         .         .         .         .         .         .         .         .         .         .         .
 17 .I        .         .         .         .         .         .         .         .         .         .         .         .
 18 .I        .         .         .         .         .         .         .         .         .         .         .         .
 19 .  O I    .         .         .         .         .         .         .         .         .         .         .         .
 20 .         .         .      O  I         .         .         .         .         .         .         .         .         .
 21 .         .         .         .         .         .    I    .  O      .         .         .         .         .         .
 22 .         .         .         .         .         .    O I  .         .         .         .         .         .         .
 23 .         .         .         .         .         OI        .         .         .         .         .         .         .
 24 .         .         .         .         .  OI     .         .         .         .         .         .         .         .
 25 .         .         .         .       OI.         .         .         .         .         .         .         .         .
 26 .         .         .         . OI      .         .         .         .         .         .         .         .         .
 27 .         .         .    OI   .         .         .         .         .         .         .         .         .         .
 28 .         .         I         .         .         .         .         .         .         .         .         .         .
 29 .         .   IO    .         .         .         .         .         .         .         .         .         .         .
 30 .         I         .         .         .         .         .         .         .         .         .         .         .
 31 .      I  .         .         .         .         .         .         .         .         .         .         .         .
 32 .    I    .         .         .         .         .         .         .         .         .         .         .         .
 33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 34 .  IO     .         .         .         .         .         .         .         .         .         .         .         .
 35 . IO      .         .         .         .         .         .         .         .         .         .         .         .
 36 . I       .         .         .         .         .         .         .         .         .         .         .         .
 37 .IO       .         .         .         .         .         .         .         .         .         .         .         .
 38 .I        .         .         .         .         .         .         .         .         .         .         .         .
 39 .I        .         .         .         .         .         .         .         .         .         .         .         .
 40 .I        .         .         .         .         .         .         .         .         .         .         .         .
 41 .I        .         .         .         .         .         .         .         .         .         .         .         .
 42 .I        .         .         .         .         .         .         .         .         .         .         .         .
 43 .I        .         .         .         .         .         .         .         .         .         .         .         .
 44 .I        .         .         .         .         .         .         .         .         .         .         .         .
 45 .I        .         .         .         .         .         .         .         .         .         .         .         .
 46 .I        .         .         .         .         .         .         .         .         .         .         .         .
 47 .I        .         .         .         .         .         .         .         .         .         .         .         .
 48 .I        .         .         .         .         .         .         .         .         .         .         .         .
 49 .I        .         .         .         .         .         .         .         .         .         .         .         .
 50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*


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                                         SUB-AREA RUNOFF COMPUTATION

             RUNOFF HYDROGRAPH LOCAL INFLOW  AT RTE 280  (AREA B)   POINT 2

                               ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                   2       0       0       0       0       0       1

                                            HYDROGRAPH DATA
                IHYDG    IUHG   TAREA    SNAP   TRSDA   TRSPC   RATIO   ISNOW   ISAME   LOCAL
                    0       0    3.60    0.00    0.00    0.00   0.000       0       0       0

                                              PRECIP DATA
                                          NP   STORM    DAJ     DAK
                                          24    7.01   0.00    0.00
                                             PRECIP PATTERN
     1.61       2.42       2.10       3.39       4.19       3.71       3.23       3.71       3.87       3.39
     3.39       3.71       3.87       5.64       4.19       6.61       6.29      11.77       4.67       4.36
     3.71       3.39       3.55       3.23

                                               LOSS DATA
               STRKR   DLTKR   RTIOL   ERAIN   STRKS   RTIOK   STRTL   CNSTL   ALSMX   RTIMP
               0.000   0.000   1.000   0.000   0.000   1.000   0.000   0.090   0.000   0.150

                                         UNIT HYDROGRAPH DATA
                                     TC=  1.50     R=  1.20     NTA=  0

                                             RECESSION DATA
                              STRTQ=     0.00     QRCSN=     0.00    RTIOR= 1.00

             UNIT HYDROGRAPH  7 END-OF-PERIOD ORDINATES, LAG=   1.38 HOURS, CP= 0.60  VOL= 1.00
     497.       888.       551.       227.        93.        38.        16.

                                          END-OF-PERIOD FLOW
                                     TIME   RAIN   EXCS     COMP Q
                                        1 0.1129 0.0364        18.
                                        2 0.1696 0.0931        79.
                                        3 0.1472 0.0707       138.
                                        4 0.2376 0.1611       202.
                                        5 0.2937 0.2172       315.
                                        6 0.2601 0.1836       399.
                                        7 0.2264 0.1499       405.
                                        8 0.2601 0.1836       394.
                                        9 0.2713 0.1948       412.
                                       10 0.2376 0.1611       416.
                                       11 0.2376 0.1611       397.
                                       12 0.2601 0.1836       393.
                                       13 0.2713 0.1948       413.
                                       14 0.3954 0.3199       495.
                                       15 0.2937 0.2172       564.
                                       16 0.4634 0.3869       631.
                                       17 0.4409 0.3644       745.
                                       18 0.8251 0.7486       998.
                                       19 0.3274 0.2509      1114.
                                       20 0.3056 0.2291       882.
                                       21 0.2601 0.1836       655.
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                   22 0.2376 0.1611      516.
                   23 0.2489 0.1726      440.
                   24 0.2264 0.1499      401.
                   25 0.0000 0.0000      295.
                   26 0.0000 0.0000      148.
                   27 0.0000 0.0000       59.
                   28 0.0000 0.0000       23.
                   29 0.0000 0.0000        9.
                   30 0.0000 0.0000        2.
                   31 0.0000 0.0000        0.
                   32 0.0000 0.0000        0.
                   33 0.0000 0.0000        0.
                   34 0.0000 0.0000        0.
                   35 0.0000 0.0000        0.
                   36 0.0000 0.0000        0.
                   37 0.0000 0.0000        0.
                   38 0.0000 0.0000        0.
                   39 0.0000 0.0000        0.
                   40 0.0000 0.0000        0.
                   41 0.0000 0.0000        0.
                   42 0.0000 0.0000        0.
                   43 0.0000 0.0000        0.
                   44 0.0000 0.0000        0.
                   45 0.0000 0.0000        0.
                   46 0.0000 0.0000        0.
                   47 0.0000 0.0000        0.
                   48 0.0000 0.0000        0.
                   49 0.0000 0.0000        0.
                   50 0.0000 0.0000        0.

                  SUM   7.03   5.15    11958.

            PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
   CFS     1114.      837.      490.       239.         11957.
INCHES                2.16      5.07       5.15           5.15
 AC-FT                415.      973.       989.           989.
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*OVF*
                                                 STATION     2

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.      200.      400.      600.      800.     1000.     1200.        0.        0.        0.        0.        0.        0.
                                                                                                       PRECIP(L) AND EXCESS(X)
      0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
       1 .I        .         .         .         .         .         .         .         .         .         .         .      LLXX
       2 .   I     .         .         .         .         .         .         .         .         .         .         .     LLXXX
       3 .      I  .         .         .         .         .         .         .         .         .         .         .     LLXXX
       4 .         I         .         .         .         .         .         .         .         .         .         .   LLXXXXX
       5 .         .     I   .         .         .         .         .         .         .         .         .         .  LLXXXXXX
       6 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
       7 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
       8 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
       9 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
      10 .         .         .I        .         .         .         .         .         .         .         .         .   LLXXXXX
      11 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
      12 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
      13 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
      14 .         .         .    I    .         .         .         .         .         .         .         .         LLXXXXXXXXX
      15 .         .         .       I .         .         .         .         .         .         .         .         .  LLXXXXXX
      16 .         .         .         . I       .         .         .         .         .         .         .       LLXXXXXXXXXXX
      17 .         .         .         .      I  .         .         .         .         .         .         .        LLXXXXXXXXXX
      18 .         .         .         .         .         I         .         .         .         .        LLXXXXXXXXXXXXXXXXXXXX
      19 .         .         .         .         .         .     I   .         .         .         .         .         . LLXXXXXXX
      20 .         .         .         .         .   I     .         .         .         .         .         .         . LLXXXXXXX
      21 .         .         .         .  I      .         .         .         .         .         .         .         .  LLXXXXXX
      22 .         .         .     I   .         .         .         .         .         .         .         .         .   LLXXXXX
      23 .         .         . I       .         .         .         .         .         .         .         .         .   LLXXXXX
      24 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
      25 .         .    I    .         .         .         .         .         .         .         .         .         .         L
      26 .      I  .         .         .         .         .         .         .         .         .         .         .         L
      27 .  I      .         .         .         .         .         .         .         .         .         .         .         L
      28 .I        .         .         .         .         .         .         .         .         .         .         .         L
      29 I         .         .         .         .         .         .         .         .         .         .         .         L
      30 I         .         .         .         .         .         .         .         .         .         .         .         L
      31 I         .         .         .         .         .         .         .         .         .         .         .         L
      32 I         .         .         .         .         .         .         .         .         .         .         .         L
      33 I         .         .         .         .         .         .         .         .         .         .         .         L
      34 I         .         .         .         .         .         .         .         .         .         .         .         L
      35 I         .         .         .         .         .         .         .         .         .         .         .         L
      36 I         .         .         .         .         .         .         .         .         .         .         .         L
      37 I         .         .         .         .         .         .         .         .         .         .         .         L
      38 I         .         .         .         .         .         .         .         .         .         .         .         L
      39 I         .         .         .         .         .         .         .         .         .         .         .         L
      40 I         .         .         .         .         .         .         .         .         .         .         .         L
      41 I         .         .         .         .         .         .         .         .         .         .         .         L
      42 I         .         .         .         .         .         .         .         .         .         .         .         L
      43 I         .         .         .         .         .         .         .         .         .         .         .         L
      44 I         .         .         .         .         .         .         .         .         .         .         .         L
      45 I         .         .         .         .         .         .         .         .         .         .         .         L
      46 I         .         .         .         .         .         .         .         .         .         .         .         L
      47 I         .         .         .         .         .         .         .         .         .         .         .         L
      48 I         .         .         .         .         .         .         .         .         .         .         .         L
      49 I         .         .         .         .         .         .         .         .         .         .         .         L
      50 I         .         .         .         .         .         .         .         .         .         .         .         L
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*OVN*

              **********          **********          **********          **********          **********
                                                  HYDROGRAPH BALANCE

                   BALANCED HYDROGRAPH LOCAL INFLOW   AT  RTE 280  (AREA B)  POINT 2

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                      2      88       0       0       0       0       1

            BALANCE DESIRED      1     1093.     24    10987.      0        0.      0        0.      0        0.
         BALANCE RESULTS            1093.           10987.               0.               0.               0.

NUMBER OF ITERATIONS=  1

                                             END-OF-PERIOD FLOWS AT     2
                                                    SUM=    11163.
                 15.       73.      128.      188.      292.      371.      376.      366.      382.      387.
                368.      365.      383.      459.      524.      586.      691.      927.     1093.      819.
                609.      480.      409.      372.      274.      137.       55.       22.        8.        2.
                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.

                                        PEAK    6-HOUR   24-HOUR   72-HOUR    TOTAL VOLUME
                                CFS     1093.      788.      458.      223.         11163.
                             INCHES                2.03      4.73      4.81           4.81
                              AC-FT                391.      908.      923.           923.
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*OVF*
                                             STATION     2

                        INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
   0.      100.      200.      300.      400.      500.      600.      700.      800.      900.     1000.     1100.        0.
   1 . I       .         .         .         .         .         .         .         .         .         .         .         .
   2 .      I  .         .         .         .         .         .         .         .         .         .         .         .
   3 .         .  I      .         .         .         .         .         .         .         .         .         .         .
   4 .         .        I.         .         .         .         .         .         .         .         .         .         .
   5 .         .         .        I.         .         .         .         .         .         .         .         .         .
   6 .         .         .         .      I  .         .         .         .         .         .         .         .         .
   7 .         .         .         .       I .         .         .         .         .         .         .         .         .
   8 .         .         .         .      I  .         .         .         .         .         .         .         .         .
   9 .         .         .         .       I .         .         .         .         .         .         .         .         .
  10 .         .         .         .        I.         .         .         .         .         .         .         .         .
  11 .         .         .         .      I  .         .         .         .         .         .         .         .         .
  12 .         .         .         .      I  .         .         .         .         .         .         .         .         .
  13 .         .         .         .       I .         .         .         .         .         .         .         .         .
  14 .         .         .         .         .     I   .         .         .         .         .         .         .         .
  15 .         .         .         .         .         . I       .         .         .         .         .         .         .
  16 .         .         .         .         .         .        I.         .         .         .         .         .         .
  17 .         .         .         .         .         .         .        I.         .         .         .         .         .
  18 .         .         .         .         .         .         .         .         .         .  I      .         .         .
  19 .         .         .         .         .         .         .         .         .         .         .        I.         .
  20 .         .         .         .         .         .         .         .         . I       .         .         .         .
  21 .         .         .         .         .         .         .I        .         .         .         .         .         .
  22 .         .         .         .         .       I .         .         .         .         .         .         .         .
  23 .         .         .         .         .I        .         .         .         .         .         .         .         .
  24 .         .         .         .      I  .         .         .         .         .         .         .         .         .
  25 .         .         .      I  .         .         .         .         .         .         .         .         .         .
  26 .         .   I     .         .         .         .         .         .         .         .         .         .         .
  27 .      I  .         .         .         .         .         .         .         .         .         .         .         .
  28 . I       .         .         .         .         .         .         .         .         .         .         .         .
  29 .I        .         .         .         .         .         .         .         .         .         .         .         .
  30 I         .         .         .         .         .         .         .         .         .         .         .         .
  31 I         .         .         .         .         .         .         .         .         .         .         .         .
  32 I         .         .         .         .         .         .         .         .         .         .         .         .
  33 I         .         .         .         .         .         .         .         .         .         .         .         .
  34 I         .         .         .         .         .         .         .         .         .         .         .         .
  35 I         .         .         .         .         .         .         .         .         .         .         .         .
  36 I         .         .         .         .         .         .         .         .         .         .         .         .
  37 I         .         .         .         .         .         .         .         .         .         .         .         .
  38 I         .         .         .         .         .         .         .         .         .         .         .         .
  39 I         .         .         .         .         .         .         .         .         .         .         .         .
  40 I         .         .         .         .         .         .         .         .         .         .         .         .
  41 I         .         .         .         .         .         .         .         .         .         .         .         .
  42 I         .         .         .         .         .         .         .         .         .         .         .         .
  43 I         .         .         .         .         .         .         .         .         .         .         .         .
  44 I         .         .         .         .         .         .         .         .         .         .         .         .
  45 I         .         .         .         .         .         .         .         .         .         .         .         .
  46 I         .         .         .         .         .         .         .         .         .         .         .         .
  47 I         .         .         .         .         .         .         .         .         .         .         .         .
  48 I         .         .         .         .         .         .         .         .         .         .         .         .
  49 I         .         .         .         .         .         .         .         .         .         .         .         .
  50 I         .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

              **********          **********          **********          **********          **********

                                                 COMBINE HYDROGRAPHS

                   COMBINE LOCAL INFLOW (AREA B) WITH FLOW ROUTED FROM  RESERVOIR   AT POINT 2

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT    INAME
                                      2       2       0       0       0       0       1


                                            SUM OF 2 HYDROGRAPHS AT     2
                 15.       73.      128.      189.      295.      376.      384.      379.      400.      410.
                398.      400.      425.      507.      578.      647.      761.     1006.     1417.     3534.
               6804.     6004.     5371.     4678.     4028.     3310.     2547.     2027.     1471.     1051.
                740.      534.      441.      357.      277.      207.      154.      122.      109.      103.
                101.      100.       99.       99.       99.       98.       98.       98.       98.       97.

                                         PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                CFS     6804.     5070.     2045.     1073.          53646.
                             INCHES                2.26      3.64      3.98            3.98
                              AC-FT               2515.     4059.     4436.           4436.
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*OVF*
                                                 STATION     2

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
       0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
       1 I         .         .         .         .         .         .         .         .         .         .         .         .
       2 .I        .         .         .         .         .         .         .         .         .         .         .         .
       3 .I        .         .         .         .         .         .         .         .         .         .         .         .
       4 . I       .         .         .         .         .         .         .         .         .         .         .         .
       5 .  I      .         .         .         .         .         .         .         .         .         .         .         .
       6 .   I     .         .         .         .         .         .         .         .         .         .         .         .
       7 .   I     .         .         .         .         .         .         .         .         .         .         .         .
       8 .   I     .         .         .         .         .         .         .         .         .         .         .         .
       9 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      10 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      11 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      12 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      13 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      14 .    I    .         .         .         .         .         .         .         .         .         .         .         .
      15 .     I   .         .         .         .         .         .         .         .         .         .         .         .
      16 .     I   .         .         .         .         .         .         .         .         .         .         .         .
      17 .       I .         .         .         .         .         .         .         .         .         .         .         .
      18 .         I         .         .         .         .         .         .         .         .         .         .         .
      19 .         .   I     .         .         .         .         .         .         .         .         .         .         .
      20 .         .         .         .    I    .         .         .         .         .         .         .         .         .
      21 .         .         .         .         .         .         .       I .         .         .         .         .         .
      22 .         .         .         .         .         .         I         .         .         .         .         .         .
      23 .         .         .         .         .         .   I     .         .         .         .         .         .         .
      24 .         .         .         .         .      I  .         .         .         .         .         .         .         .
      25 .         .         .         .         I         .         .         .         .         .         .         .         .
      26 .         .         .         .  I      .         .         .         .         .         .         .         .         .
      27 .         .         .    I    .         .         .         .         .         .         .         .         .         .
      28 .         .         I         .         .         .         .         .         .         .         .         .         .
      29 .         .    I    .         .         .         .         .         .         .         .         .         .         .
      30 .         .I        .         .         .         .         .         .         .         .         .         .         .
      31 .      I  .         .         .         .         .         .         .         .         .         .         .         .
      32 .    I    .         .         .         .         .         .         .         .         .         .         .         .
      33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      34 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      35 .  I      .         .         .         .         .         .         .         .         .         .         .         .
      36 . I       .         .         .         .         .         .         .         .         .         .         .         .
      37 . I       .         .         .         .         .         .         .         .         .         .         .         .
      38 .I        .         .         .         .         .         .         .         .         .         .         .         .
      39 .I        .         .         .         .         .         .         .         .         .         .         .         .
      40 .I        .         .         .         .         .         .         .         .         .         .         .         .
      41 .I        .         .         .         .         .         .         .         .         .         .         .         .
      42 .I        .         .         .         .         .         .         .         .         .         .         .         .
      43 .I        .         .         .         .         .         .         .         .         .         .         .         .
      44 .I        .         .         .         .         .         .         .         .         .         .         .         .
      45 .I        .         .         .         .         .         .         .         .         .         .         .         .
      46 .I        .         .         .         .         .         .         .         .         .         .         .         .
      47 .I        .         .         .         .         .         .         .         .         .         .         .         .
      48 .I        .         .         .         .         .         .         .         .         .         .         .         .
      49 .I        .         .         .         .         .         .         .         .         .         .         .         .
      50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

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                               RUNOFF SUMMARY, AVERAGE FLOW

                                   PEAK     6-HOUR    24-HOUR    72-HOUR       AREA
HYDROGRAPH AT            1        7563.      5775.      3501.      1745.      17.30
ROUTED TO                1        5909.      4815.      1718.       852.      17.30
ROUTED TO                2        6196.      4653.      1717.       850.      17.30
HYDROGRAPH AT            2        1093.       788.       458.       223.       3.60
ROUTED TO                2        1093.       788.       458.       223.       3.60
 2 COMBINED              2        6804.      5070.      2045.      1073.      20.90
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3-a

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*******************************
HEC-1 VERSION DATED JAN 1973
UPDATED AUG 74
CHANGE NO. 01
*******************************
                    STEVENS CREEK  HYDROLOGY   100 YEAR  FLOOD HYDROGRAPHS    RESERVOIR   2000 AF       VOLUME  UNADJUSTED
                                              RESERVOIR  PEAK  OUTFLOW  BALANCED  TO  MATCH  WEIGHTED  AVERAGE
                                                     BETWEEN  REGIONAL  VALUE  AND  STREAMGAGE  STATISTICAL  VALUE
                                          JOB SPECIFICATION
                             NQ    NHR   NMIN  IDAY    IHR  IMIN METRC  IPLT  IPRT NSTAN
                             50      1      0     0      0     0     0     2     0     0
                                            JOPER      NWT
                                               3         0



               **********          **********          **********          **********          **********

                                     SUB-AREA RUNOFF COMPUTATION

                   RUNOFF HYDROGRAPH  INFLOW TO RESERVOIR   (AREA A)      POINT 1

                                ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                    1        0        0        0        0        0        1

                                               HYDROGRAPH DATA
                   IHYDG     IUHG    TAREA     SNAP    TRSDA    TRSPC    RATIO    ISNOW    ISAME    LOCAL
                       0        0    17.30     0.00     0.00     0.00    0.000        0        0        0

                                                 PRECIP DATA
                                          NP   STORM       DAJ      DAK
                                          24   10.18      0.00     0.00
                                               PRECIP PATTERN
               1.66       2.32       2.16       3.49       4.32       3.66       3.32       3.82       3.82       3.49
               3.49       3.82       3.98       5.82       4.15       6.32       6.15      10.96       4.65       4.47
               3.82       3.49       3.49       3.32

                                                  LOSS DATA
                  STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
                  0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.130    0.000    0.000

                                             UNIT HYDROGRAPH DATA
                                    TC=  2.30      R=  2.40      NTA=   6

                                          .  UNIT GRAPH TIME-AREA ORDINATES
               0.15       3.18       6.70      10.55      15.00      17.30

                                               RECESSION DATA
                               STRTQ=     0.00     QRCSN=     0.00     RTIOR= 1.00

                  UNIT HYDROGRAPH 14 END-OF-PERIOD ORDINATES, LAG=    2.06 HOURS, CP= 0.52   VOL= 1.00
               320.       2294.      2607.      1975.      1228.       805.       527.       345.       226.       148.
                97.         64.        42.        27.

                                              END-OF-PERIOD FLOW
                                          TIME    RAIN    EXCS     COMP Q
                                             1 0.1699 0.0399        32.
                                             2 0.2362 0.1062       176.
                                             3 0.2199 0.0899       419.
                   4 0.3553 0.2253       741.
                   5 0.4398 0.3098      1252.
                   6 0.3726 0.2426      1927.
                   7 0.3380 0.2080      2173.
                   8 0.3889 0.2589      2321.
                   9 0.3889 0.2589      2458.
                  10 0.3553 0.2253      2570.
                  11 0.3553 0.2253      2594.
                  12 0.3889 0.2589      2599.
                  13 0.4052 0.2752      2670.
                  14 0.5925 0.4625      2935.
                  15 0.4235 0.2935      3322.
                  16 0.6434 0.5134      3668.
                  17 0.6261 0.4961      4111.
                  18 1.1157 0.9857      4985.
                  19 0.4734 0.3434      5907.
                  20 0.4550 0.3250      5907.
                  21 0.3889 0.2589      5193.
                  22 0.3553 0.2253      4454.
                  23 0.3553 0.2253      3834.
                  24 0.3380 0.2080      3366.
                  25 0.0000 0.0000      2853.
                  26 0.0000 0.0000      2132.
                  27 0.0000 0.0000      1427.
                  28 0.0000 0.0000       926.
                  29 0.0000 0.0000       602.
                  30 0.0000 0.0000       385.
                  31 0.0000 0.0000       243.
                  32 0.0000 0.0000       142.
                  33 0.0000 0.0000        87.
                  34 0.0000 0.0000        51.
                  35 0.0000 0.0000        29.
                  36 0.0000 0.0000        15.
                  37 0.0000 0.0000         6.
                  38 0.0000 0.0000         0.
                  39 0.0000 0.0000         0.
                  40 0.0000 0.0000         0.
                  41 0.0000 0.0000         0.
                  42 0.0000 0.0000         0.
                  43 0.0000 0.0000         0.
                  44 0.0000 0.0000         0.
                  45 0.0000 0.0000         0.
                  46 0.0000 0.0000         0.
                  47 0.0000 0.0000         0.
                  48 0.0000 0.0000         0.
                  49 0.0000 0.0000         0.
                  50 0.0000 0.0000         0.

                 SUM  10.22   7.10     78412.

             PEAK    6-HOUR   24-HOUR    72-HOUR   TOTAL VOLUME
      CFS    5907.    5095.     3145.      1563.         78412.
   INCHES              2.74      6.75       7.03           7.03
    AC-FT             2527.     6242.      6434.          6484.
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*OVF*
                                            STATION     1

                        INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
   0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
                                                                                                   PRECIP(L) AND EXCESS(X)
  0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
   1 I         .         .         .         .         .         .         .         .         .         .         .     LLLXX
   2 . I       .         .         .         .         .         .         .         .         .         .         .   LLLXXXX
   3 .   I     .         .         .         .         .         .         .         .         .         .         .    LLLXXX
   4 .      I  .         .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
   5 .         .  I      .         .         .         .         .         .         .         .         .        LLLXXXXXXXXX
   6 .         .       I .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
   7 .         .         . I       .         .         .         .         .         .         .         .         . LLLXXXXXX
   8 .         .         .  I      .         .         .         .         .         .         .         .         LLLLXXXXXXX
   9 .         .         .    I    .         .         .         .         .         .         .         .         LLLLXXXXXXX
  10 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
  11 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
  12 .         .         .     I   .         .         .         .         .         .         .         .         LLLLXXXXXXX
  13 .         .         .      I  .         .         .         .         .         .         .         .         LLLXXXXXXXX
  14 .         .         .        I.         .         .         .         .         .         .    LLLXXXXXXXXXXXXX
  15 .         .         .         .  I      .         .         .         .         .         .        LLLLXXXXXXXX
  16 .         .         .         .      I  .         .         .         .         .         .   LLLXXXXXXXXXXXXXX
  17 .         .         .         .         . I       .         .         .         .         .   LLLLXXXXXXXXXXXXX
  18 .         .         .         .         .         I         .         .         .         . LLLXXXXXXXXXXXXXXXXXXXXXXXXXX
  19 .         .         .         .         .         .        I.         .         .         .       LLLXXXXXXXXXX
  20 .         .         .         .         .         .        I.         .         .         .        LLLXXXXXXXXX
  21 .         .         .         .         .         . I       .         .         .         .         LLLLXXXXXXX
  22 .         .         .         .         .    I    .         .         .         .         .         .LLLXXXXXXX
  23 .         .         .         .       I .         .         .         .         .         .         .LLLXXXXXXX
  24 .         .         .         .   I     .         .         .         .         .         .         . LLLXXXXXX
  25 .         .         .        I.         .         .         .         .         .         .         .         L
  26 .         .         .I        .         .         .         .         .         .         .         .         L
  27 .         .   I     .         .         .         .         .         .         .         .         .         L
  28 .        I.         .         .         .         .         .         .         .         .         .         L
  29 .     I   .         .         .         .         .         .         .         .         .         .         L
  30 .   I     .         .         .         .         .         .         .         .         .         .         L
  31 . I       .         .         .         .         .         .         .         .         .         .         L
  32 .I        .         .         .         .         .         .         .         .         .         .         L
  33 .I        .         .         .         .         .         .         .         .         .         .         L
  34 .I        .         .         .         .         .         .         .         .         .         .         L
  35 I         .         .         .         .         .         .         .         .         .         .         L
  36 I         .         .         .         .         .         .         .         .         .         .         L
  37 I         .         .         .         .         .         .         .         .         .         .         L
  38 I         .         .         .         .         .         .         .         .         .         .         L
  39 I         .         .         .         .         .         .         .         .         .         .         L
  40 I         .         .         .         .         .         .         .         .         .         .         L
  41 I         .         .         .         .         .         .         .         .         .         .         L
  42 I         .         .         .         .         .         .         .         .         .         .         L
  43 I         .         .         .         .         .         .         .         .         .         .         L
  44 I         .         .         .         .         .         .         .         .         .         .         L
  45 I         .         .         .         .         .         .         .         .         .         .         L
  46 I         .         .         .         .         .         .         .         .         .         .         L
  47 I         .         .         .         .         .         .         .         .         .         .         L
  48 I         .         .         .         .         .         .         .         .         .         .         L
  49 I         .         .         .         .         .         .         .         .         .         .         L
  50 I         .         .         .         .         .         .         .         .         .         .         L
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                                                  HYDROGRAPH BALANCE

                   BALANCED HYDROGRAPH INFLOW TO  RESERVOIR    AREA A

                                       ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                           1       83        0        0        0        0        1

            BALANCE DESIRED       1      7563.     24     66752.       0         0.       0         0.       0         0.
           BALANCE RESULTS              7563.            66752.                  0.                 0.                 0.

NUMBER OF ITERATIONS=  4

                                              END-OF-PERIOD FLOWS AT       1
                                                     SUM=     69331.
                    19.       156.       37[illegible].       655.      1065.      1554.      1849.      1975.      2091.      2187.
                  2206.      2211.      2271.      2497.      2826.      3120.      3497.      4241.      7563.      5025.
                  4418.      3789.      3261.      2863.      2427.      1814.      1214.       788.       532.       340.
                   215.       125.        77.        45.        25.        13.         5.         0.         0.         0.
                     0.         0.         0.         0.         0.         0.         0.         0.         0.         0.

                                            PEAK     6-HOUR     24-HOUR     72-HOUR    TOTAL VOLUME
                                  CFS      7563.      4755.       2781.       1387.          69331.
                               INCHES                  2.56        5.98        6.21            6.21
                                AC-FT                 2359.       5520.       5733.           5733.
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  *OVF*
                                                  STATION      1

                              INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
         0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
         1 I         .         .         .         .         .         .         .         .         .         .         .         .
         2 . I       .         .         .         .         .         .         .         .         .         .         .         .
         3 .   I     .         .         .         .         .         .         .         .         .         .         .         .
         4 .      I  .         .         .         .         .         .         .         .         .         .         .         .
         5 .         .I        .         .         .         .         .         .         .         .         .         .         .
         6 .         .     I   .         .         .         .         .         .         .         .         .         .         .
         7 .         .       I .         .         .         .         .         .         .         .         .         .         .
         8 .         .         I         .         .         .         .         .         .         .         .         .         .
         9 .         .         .I        .         .         .         .         .         .         .         .         .         .
        10 .         .         . I       .         .         .         .         .         .         .         .         .         .
        11 .         .         . I       .         .         .         .         .         .         .         .         .         .
        12 .         .         . I       .         .         .         .         .         .         .         .         .         .
        13 .         .         .  I      .         .         .         .         .         .         .         .         .         .
        14 .         .         .    I    .         .         .         .         .         .         .         .         .         .
        15 .         .         .       I .         .         .         .         .         .         .         .         .         .
        16 .         .         .         .I        .         .         .         .         .         .         .         .         .
        17 .         .         .         .    I    .         .         .         .         .         .         .         .         .
        18 .         .         .         .         . I       .         .         .         .         .         .         .         .
        19 .         .         .         .         .         .         .         .     I   .         .         .         .         .
        20 .         .         .         .         .         I         .         .         .         .         .         .         .
        21 .         .         .         .         .   I     .         .         .         .         .         .         .         .
        22 .         .         .         .       I .         .         .         .         .         .         .         .         .
        23 .         .         .         .  I      .         .         .         .         .         .         .         .         .
        24 .         .         .        I.         .         .         .         .         .         .         .         .         .
        25 .         .         .   I     .         .         .         .         .         .         .         .         .         .
        26 .         .       I .         .         .         .         .         .         .         .         .         .         .
        27 .         .  I      .         .         .         .         .         .         .         .         .         .         .
        28 .       I .         .         .         .         .         .         .         .         .         .         .         .
        29 .    I    .         .         .         .         .         .         .         .         .         .         .         .
        30 .  I      .         .         .         .         .         .         .         .         .         .         .         .
        31 . I       .         .         .         .         .         .         .         .         .         .         .         .
        32 .I        .         .         .         .         .         .         .         .         .         .         .         .
        33 .I        .         .         .         .         .         .         .         .         .         .         .         .
        34 I         .         .         .         .         .         .         .         .         .         .         .         .
        35 I         .         .         .         .         .         .         .         .         .         .         .         .
        36 I         .         .         .         .         .         .         .         .         .         .         .         .
        37 I         .         .         .         .         .         .         .         .         .         .         .         .
        38 I         .         .         .         .         .         .         .         .         .         .         .         .
        39 I         .         .         .         .         .         .         .         .         .         .         .         .
        40 I         .         .         .         .         .         .         .         .         .         .         .         .
        41 I         .         .         .         .         .         .         .         .         .         .         .         .
        42 I         .         .         .         .         .         .         .         .         .         .         .         .
        43 I         .         .         .         .         .         .         .         .         .         .         .         .
        44 I         .         .         .         .         .         .         .         .         .         .         .         .
        45 I         .         .         .         .         .         .         .         .         .         .         .         .
        46 I         .         .         .         .         .         .         .         .         .         .         .         .
        47 I         .         .         .         .         .         .         .         .         .         .         .         .
        48 I         .         .         .         .         .         .         .         .         .         .         .         .
        49 I         .         .         .         .         .         .         .         .         .         .         .         .
        50 I         .         .         .         .         .         .         .         .         .         .         .         .
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                                             HYDROGRAPH ROUTING

            ROUTE FLOW  THRU RESERVOIR   POINT 1

                                   ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                       1       1       0       0       0       0       1
                                                        ROUTING DATA
                                           QLOSS   CLOSS     AVG    IRES   ISAME
                                             0.0   0.000    0.00       1       0

                                   NSTPS   NSTDL     LAG   AMSKK       X     TSK   STORA
                                       0       0       0   0.000   0.000   0.000   2000.

      STORAGE=        0.     3804.     3899.     3995.     4092.     4191.     4292.     4394.     4498.     4604.
      OUTFLOW=        0.      100.      557.     1408.     2529.     3880.     5438.     7192.     9127.    11243.

                                           TIME  EOP STOR    AVG IN   EOP OUT
                                              1     1997.       19.       53.
                                              2     2000.       87.       53.
                                              3     2017.      263.       53.
                                              4     2055.      513.       54.
                                              5     2122.      860.       56.
                                              6     2225.     1310.       59.
                                              7     2361.     1702.       62.
                                              8     2514.     1912.       66.
                                              9     2676.     2033.       70.
                                             10     2847.     2139.       75.
                                             11     3022.     2196.       79.
                                             12     3198.     2209.       84.
                                             13     3376.     2241.       89.
                                             14     3565.     2384.       94.
                                             15     3777.     2662.       99.
                                             16     3970.     2973.     1186.
                                             17     4091.     3309.     2513.
                                             18     4162.     3869.     3489.
                                             19     4285.     5902.     5336.
                                             20     4332.     6294.     6125.
                                             21     4253.     4721.     4989.
                                             22     4218.     4103.     4299.
                                             23     4179.     3525.     3710.
                                             24     4144.     3062.     3243.
                                             25     4113.     2645.     2812.
                                             26     4075.     2120.     2336.
                                             27     4029.     1514.     1804.
                                             28     3983.     1001.     1306.
                                             29     3944.      660.      960.
                                             30     3913.      436.      679.
                                             31     3887.      278.      499.
                                             32     3864.      170.      390.
                                             33     3844.      101.      294.
                                             34     3828.       61.      217.
                                             35     3816.       35.      157.
                                             36     3806.       19.      111.
                                             37     3798.        9.      100.
                                             38     3790.        3.      100.
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               39     3782.        0.       99.
               40     3774.        0.       99.
               41     3766.        0.       99.
               42     3758.        0.       99.
               43     3749.        0.       99.
               44     3741.        0.       98.
               45     3733.        0.       98.
               46     3725.        0.       98.
               47     3717.        0.       98.
               48     3709.        0.       97.
               49     3701.        0.       97.
               50     3693.        0.       97.

              SUM                        48880.

            PEAK   6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
   CFS     6125.    4658.     1948.      978.         48880.
INCHES               2.50      4.19      4.38           4.38
 AC-FT              2311.     3866.     4042.          4042.
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*OVF*
                                                STATION      1

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
       0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
       1 IO        .         .         .         .         .         .         .         .         .         .         .         .
       2 .I        .         .         .         .         .         .         .         .         .         .         .         .
       3 .O I      .         .         .         .         .         .         .         .         .         .         .         .
       4 .O   I    .         .         .         .         .         .         .         .         .         .         .         .
       5 .O       I.         .         .         .         .         .         .         .         .         .         .         .
       6 .O        .  I      .         .         .         .         .         .         .         .         .         .         .
       7 .O        .      I  .         .         .         .         .         .         .         .         .         .         .
       8 .O        .        I.         .         .         .         .         .         .         .         .         .         .
       9 .O        .         I         .         .         .         .         .         .         .         .         .         .
      10 .O        .         .I        .         .         .         .         .         .         .         .         .         .
      11 .O        .         . I       .         .         .         .         .         .         .         .         .         .
      12 .O        .         . I       .         .         .         .         .         .         .         .         .         .
      13 .O        .         . I       .         .         .         .         .         .         .         .         .         .
      14 .O        .         .   I     .         .         .         .         .         .         .         .         .         .
      15 .O        .         .      I  .         .         .         .         .         .         .         .         .         .
      16 .         . O       .         I         .         .         .         .         .         .         .         .         .
      17 .         .         .    O    .  I      .         .         .         .         .         .         .         .         .
      18 .         .         .         .    O   I.         .         .         .         .         .         .         .         .
      19 .         .         .         .         .         .  O     I.         .         .         .         .         .         .
      20 .         .         .         .         .         .         .O I      .         .         .         .         .         .
      21 .         .         .         .         .      I  O         .         .         .         .         .         .         .
      22 .         .         .         .         .I O      .         .         .         .         .         .         .         .
      23 .         .         .         .    I O  .         .         .         .         .         .         .         .         .
      24 .         .         .         .IO       .         .         .         .         .         .         .         .         .
      25 .         .         .     I O .         .         .         .         .         .         .         .         .         .
      26 .         .         .I O      .         .         .         .         .         .         .         .         .         .
      27 .         .    I  O .         .         .         .         .         .         .         .         .         .         .
      28 .         I  O      .         .         .         .         .         .         .         .         .         .         .
      29 .      I  O         .         .         .         .         .         .         .         .         .         .         .
      30 .   I  O  .         .         .         .         .         .         .         .         .         .         .         .
      31 .  I O    .         .         .         .         .         .         .         .         .         .         .         .
      32 . I O     .         .         .         .         .         .         .         .         .         .         .         .
      33 .I O      .         .         .         .         .         .         .         .         .         .         .         .
      34 .IO       .         .         .         .         .         .         .         .         .         .         .         .
      35 I O       .         .         .         .         .         .         .         .         .         .         .         .
      36 IO        .         .         .         .         .         .         .         .         .         .         .         .
      37 IO        .         .         .         .         .         .         .         .         .         .         .         .
      38 IO        .         .         .         .         .         .         .         .         .         .         .         .
      39 IO        .         .         .         .         .         .         .         .         .         .         .         .
      40 IO        .         .         .         .         .         .         .         .         .         .         .         .
      41 IO        .         .         .         .         .         .         .         .         .         .         .         .
      42 IO        .         .         .         .         .         .         .         .         .         .         .         .
      43 IO        .         .         .         .         .         .         .         .         .         .         .         .
      44 IO        .         .         .         .         .         .         .         .         .         .         .         .
      45 IO        .         .         .         .         .         .         .         .         .         .         .         .
      46 IO        .         .         .         .         .         .         .         .         .         .         .         .
      47 IO        .         .         .         .         .         .         .         .         .         .         .         .
      48 IO        .         .         .         .         .         .         .         .         .         .         .         .
      49 IO        .         .         .         .         .         .         .         .         .         .         .         .
      50 IO        .         .         .         .         .         .         .         .         .         .         .         .
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                                                  HYDROGRAPH BALANCE

                   BALANCED HYDROGRAPH PEAK TO FIT WEIGHTED GAGE STATISTICS  5762 CFS (ADJUSTED)

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                      2      88       0       0       0       0       1

            BALANCE DESIRED      1     5410.      0        0.      0        0.      0        0.      0        0.
         BALANCE RESULTS            5410.               0.               0.               0.               0.

NUMBER OF ITERATIONS=  1

                                             END-OF-PERIOD FLOWS AT     2
                                                    SUM=    43168.
                 42.       46.       47.       48.       49.       52.       55.       58.       62.       66.
                 70.       74.       78.       83.       89.     1048.     2219.     3082.     4713.     5410.
               4407.     3797.     3277.     2864.     2484.     2063.     1594.     1153.      848.      600.
                441.      345.      260.      192.      138.       98.       88.       88.       88.       88.
                 87.       87.       87.       87.       87.       86.       86.       86.       86.       86.

                                        PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                CFS    5410.     4114.     1721.      863.         43168.
                             INCHES                2.21      3.70      3.87           3.87
                              AC-FT               2041.     3415.     3569.          3569.
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*OVF*
                                           STATION     2

                      INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
 0.      500.     1000.     1500.     2000.     2500.     3000.     3500.     4000.     4500.     5000.     5500.         0.
 1 .I        .         .         .         .         .         .         .         .         .         .         .         .
 2 .I        .         .         .         .         .         .         .         .         .         .         .         .
 3 .I        .         .         .         .         .         .         .         .         .         .         .         .
 4 .I        .         .         .         .         .         .         .         .         .         .         .         .
 5 .I        .         .         .         .         .         .         .         .         .         .         .         .
 6 .I        .         .         .         .         .         .         .         .         .         .         .         .
 7 .I        .         .         .         .         .         .         .         .         .         .         .         .
 8 .I        .         .         .         .         .         .         .         .         .         .         .         .
 9 .I        .         .         .         .         .         .         .         .         .         .         .         .
10 .I        .         .         .         .         .         .         .         .         .         .         .         .
11 .I        .         .         .         .         .         .         .         .         .         .         .         .
12 .I        .         .         .         .         .         .         .         .         .         .         .         .
13 . I       .         .         .         .         .         .         .         .         .         .         .         .
14 . I       .         .         .         .         .         .         .         .         .         .         .         .
15 . I       .         .         .         .         .         .         .         .         .         .         .         .
16 .         .         .I        .         .         .         .         .         .         .         .         .         .
17 .         .         .         .         .   I     .         .         .         .         .         .         .         .
18 .         .         .         .         .         .         . I       .         .         .         .         .         .
19 .         .         .         .         .         .         .         .         .         .    I    .         .         .
20 .         .         .         .         .         .         .         .         .         .         .       I .         .
21 .         .         .         .         .         .         .         .         .       I .         .         .         .
22 .         .         .         .         .         .         .         .      I  .         .         .         .         .
23 .         .         .         .         .         .         .      I  .         .         .         .         .         .
24 .         .         .         .         .         .      I  .         .         .         .         .         .         .
25 .         .         .         .         .         I         .         .         .         .         .         .         .
26 .         .         .         .         .I        .         .         .         .         .         .         .         .
27 .         .         .         . I       .         .         .         .         .         .         .         .         .
28 .         .         .  I      .         .         .         .         .         .         .         .         .         .
29 .         .      I  .         .         .         .         .         .         .         .         .         .         .
30 .         . I       .         .         .         .         .         .         .         .         .         .         .
31 .        I.         .         .         .         .         .         .         .         .         .         .         .
32 .      I  .         .         .         .         .         .         .         .         .         .         .         .
33 .    I    .         .         .         .         .         .         .         .         .         .         .         .
34 .   I     .         .         .         .         .         .         .         .         .         .         .         .
35 .  I      .         .         .         .         .         .         .         .         .         .         .         .
36 . I       .         .         .         .         .         .         .         .         .         .         .         .
37 . I       .         .         .         .         .         .         .         .         .         .         .         .
38 . I       .         .         .         .         .         .         .         .         .         .         .         .
39 . I       .         .         .         .         .         .         .         .         .         .         .         .
40 . I       .         .         .         .         .         .         .         .         .         .         .         .
41 . I       .         .         .         .         .         .         .         .         .         .         .         .
42 . I       .         .         .         .         .         .         .         .         .         .         .         .
43 . I       .         .         .         .         .         .         .         .         .         .         .         .
44 . I       .         .         .         .         .         .         .         .         .         .         .         .
45 . I       .         .         .         .         .         .         .         .         .         .         .         .
46 . I       .         .         .         .         .         .         .         .         .         .         .         .
47 . I       .         .         .         .         .         .         .         .         .         .         .         .
48 . I       .         .         .         .         .         .         .         .         .         .         .         .
49 . I       .         .         .         .         .         .         .         .         .         .         .         .
50 . I       .         .         .         .         .         .         .         .         .         .         .         .
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                                                   HYDROGRAPH ROUTING

                 ROUTE  STEVENS CREEK RESERVOIR OUTFLOW  DOWN TO  RTE 280    POINT 2

                              ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                  2        1        0        0        0        0        1
                                                  ROUTING DATA
                                       QLOSS    CLOSS      AVG     IRES    ISAME
                                         0.0    0.000     0.00        1        0

                              NSTPS    NSTDL      LAG    AMSKK        X      TSK    STORA
                                  0        0        0    0.000    0.000    0.000       0.

      STORAGE=        0.        50.       100.       150.       250.       380.         0.         0.         0.         0.
      OUTFLOW=        0.       500.      1500.      2500.      6500.     13000.         0.         0.         0.         0.

                                       TIME  EOP STOR     AVG IN   EOP OUT
                                          1        2.        42.       24.
                                          2        4.        44.       36.
                                          3        4.        47.       42.
                                          4        5.        47.       45.
                                          5        5.        48.       47.
                                          6        5.        50.       49.
                                          7        5.        53.       52.
                                          8        5.        57.       54.
                                          9        6.        60.       58.
                                         10        6.        64.       62.
                                         11        7.        68.       65.
                                         12        7.        72.       69.
                                         13        7.        76.       73.
                                         14        8.        81.       78.
                                         15        8.        85.       82.
                                         16       37.       568.      366.
                                         17       97.      1634.     1440.
                                         18      151.      2651.     2549.
                                         19      193.      3897.     4229.
                                         20      219.      5062.     5267.
                                         21      208.      4908.     4820.
                                         22      186.      4102.     3925.
                                         23      174.      3537.     3442.
                                         24      162.      3071.     2979.
                                         25      152.      2674.     2599.
                                         26      139.      2273.     2277.
                                         27      119.      1328.     1871.
                                         28       96.      1373.     1421.
                                         29       77.      1000.     1040.
                                         30       63.       724.      754.
                                         31       52.       520.      543.
                                         32       44.       393.      440.
                                         33       36.       302.      359.
                                         34       28.       226.      281.
                                         35       21.       165.      213.
                                         36       16.       118.      158.
                                         37       12.        93.      120.
                                         38       10.        88.      101.
```

```
                           39        9.       88.       93.
                           40        9.       88.       90.
                           41        9.       88.       89.
                           42        9.       87.       88.
                           43        9.       87.       87.
                           44        9.       87.       87.
                           45        9.       87.       87.
                           46        9.       87.       87.
                           47        9.       86.       87.
                           48        9.       86.       86.
                           49        9.       86.       86.
                           50        9.       86.       86.

                          SUM                        43085.

                      PEAK    6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
            CFS      5267.     4110.      1720.       862.        43085.
         INCHES                 2.21       3.70       3.86          3.86
          AC-FT                2039.      3414.      3563.         3563.
```

```
*OVF*
                                                 STATION     2

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
       0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
       1 I         .         .         .         .         .         .         .         .         .         .         .         .
       2 I         .         .         .         .         .         .         .         .         .         .         .         .
       3 I         .         .         .         .         .         .         .         .         .         .         .         .
       4 I         .         .         .         .         .         .         .         .         .         .         .         .
       5 I         .         .         .         .         .         .         .         .         .         .         .         .
       6 OI        .         .         .         .         .         .         .         .         .         .         .         .
       7 .I        .         .         .         .         .         .         .         .         .         .         .         .
       8 .I        .         .         .         .         .         .         .         .         .         .         .         .
       9 .I        .         .         .         .         .         .         .         .         .         .         .         .
      10 .I        .         .         .         .         .         .         .         .         .         .         .         .
      11 .I        .         .         .         .         .         .         .         .         .         .         .         .
      12 .I        .         .         .         .         .         .         .         .         .         .         .         .
      13 .I        .         .         .         .         .         .         .         .         .         .         .         .
      14 .I        .         .         .         .         .         .         .         .         .         .         .         .
      15 .I        .         .         .         .         .         .         .         .         .         .         .         .
      16 .   O I   .         .         .         .         .         .         .         .         .         .         .         .
      17 .         .   O I   .         .         .         .         .         .         .         .         .         .         .
      18 .         .         .    O I  .         .         .         .         .         .         .         .         .         .
      19 .         .         .         .        I. O       .         .         .         .         .         .         .         .
      20 .         .         .         .         .         .I O      .         .         .         .         .         .         .
      21 .         .         .         .         .       OI.         .         .         .         .         .         .         .
      22 .         .         .         .        O.I        .         .         .         .         .         .         .         .
      23 .         .         .         .   OI    .         .         .         .         .         .         .         .         .
      24 .         .         .         OI        .         .         .         .         .         .         .         .         .
      25 .         .         .     OI  .         .         .         .         .         .         .         .         .         .
      26 .         .         .  I      .         .         .         .         .         .         .         .         .         .
      27 .         .       IO.         .         .         .         .         .         .         .         .         .         .
      28 .         .   I     .         .         .         .         .         .         .         .         .         .         .
      29 .         I         .         .         .         .         .         .         .         .         .         .         .
      30 .      IO .         .         .         .         .         .         .         .         .         .         .         .
      31 .    I    .         .         .         .         .         .         .         .         .         .         .         .
      32 .   I     .         .         .         .         .         .         .         .         .         .         .         .
      33 .  IO     .         .         .         .         .         .         .         .         .         .         .         .
      34 . IO      .         .         .         .         .         .         .         .         .         .         .         .
      35 . I       .         .         .         .         .         .         .         .         .         .         .         .
      36 .IO       .         .         .         .         .         .         .         .         .         .         .         .
      37 .I        .         .         .         .         .         .         .         .         .         .         .         .
      38 .I        .         .         .         .         .         .         .         .         .         .         .         .
      39 .I        .         .         .         .         .         .         .         .         .         .         .         .
      40 .I        .         .         .         .         .         .         .         .         .         .         .         .
      41 .I        .         .         .         .         .         .         .         .         .         .         .         .
      42 .I        .         .         .         .         .         .         .         .         .         .         .         .
      43 .I        .         .         .         .         .         .         .         .         .         .         .         .
      44 .I        .         .         .         .         .         .         .         .         .         .         .         .
      45 .I        .         .         .         .         .         .         .         .         .         .         .         .
      46 .I        .         .         .         .         .         .         .         .         .         .         .         .
      47 .I        .         .         .         .         .         .         .         .         .         .         .         .
      48 .I        .         .         .         .         .         .         .         .         .         .         .         .
      49 .I        .         .         .         .         .         .         .         .         .         .         .         .
      50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*


          **********          **********          **********          **********          **********

                                        SUB-AREA RUNOFF COMPUTATION

          RUNOFF HYDROGRAPH LOCAL INFLOW  AT RTE 280  (AREA B)   POINT 2

                          ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                              2       0       0       0       0       0       1

                                          HYDROGRAPH DATA
            IHYDG     IUHG    TAREA     SNAP    TRSDA    TRSPC    RATIO    ISNOW    ISAME    LOCAL
                0        0     3.60     0.00     0.00     0.00    0.000        0        0        0

                                            PRECIP DATA
                                      NP    STORM      DAJ      DAK
                                      24     7.01     0.00     0.00
                                           PRECIP PATTERN
       1.61      2.42      2.10      3.39      4.19      3.71      3.23      3.71      3.87      3.39
       3.39      3.71      3.87      5.64      4.19      6.61      6.29     11.77      4.67      4.36
       3.71      3.39      3.55      3.23

                                             LOSS DATA
          STRKR   DLTKR   RTIOL   ERAIN   STRKS   RTIOK   STRTL   CNSTL   ALSMX   RTIMP
          0.000   0.000   1.000   0.000   0.000   1.000   0.000   0.090   0.000   0.150

                                        UNIT HYDROGRAPH DATA
                                 TC=  1.50     R=  1.20     NTA=  0

                                           RECESSION DATA
                           STRTQ=     0.00     QRCSN=     0.00     RTIOR= 1.00

          UNIT HYDROGRAPH  7 END-OF-PERIOD ORDINATES, LAG=   1.38 HOURS, CP= 0.60  VOL= 1.00
       497.      888.      551.      227.       93.       39.       16.

                                          END-OF-PERIOD FLOW
                                      TIME   RAIN   EXCS     COMP Q
                                         1 0.1129 0.0364       18.
                                         2 0.1696 0.0931       79.
                                         3 0.1472 0.0707      138.
                                         4 0.2376 0.1611      202.
                                         5 0.2937 0.2172      315.
                                         6 0.2601 0.1836      399.
                                         7 0.2264 0.1499      405.
                                         8 0.2601 0.1836      394.
                                         9 0.2713 0.1948      412.
                                        10 0.2376 0.1611      416.
                                        11 0.2376 0.1611      397.
                                        12 0.2601 0.1836      393.
                                        13 0.2713 0.1948      413.
                                        14 0.3954 0.3189      495.
                                        15 0.2937 0.2172      564.
                                        16 0.4634 0.3869      631.
                                        17 0.4409 0.3644      745.
                                        18 0.8251 0.7486      998.
                                        19 0.3274 0.2509     1114.
                                        20 0.3056 0.2291      882.
                                        21 0.2601 0.1836      655.
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                   22 0.2376 0.1611      516.
                   23 0.2499 0.1724      440.
                   24 0.2264 0.1499      401.
                   25 0.0000 0.0000      295.
                   26 0.0000 0.0000      148.
                   27 0.0000 0.0000       59.
                   28 0.0000 0.0000       23.
                   29 0.0000 0.0000        9.
                   30 0.0000 0.0000        2.
                   31 0.0000 0.0000        0.
                   32 0.0000 0.0000        0.
                   33 0.0000 0.0000        0.
                   34 0.0000 0.0000        0.
                   35 0.0000 0.0000        0.
                   36 0.0000 0.0000        0.
                   37 0.0000 0.0000        0.
                   38 0.0000 0.0000        0.
                   39 0.0000 0.0000        0.
                   40 0.0000 0.0000        0.
                   41 0.0000 0.0000        0.
                   42 0.0000 0.0000        0.
                   43 0.0000 0.0000        0.
                   44 0.0000 0.0000        0.
                   45 0.0000 0.0000        0.
                   46 0.0000 0.0000        0.
                   47 0.0000 0.0000        0.
                   48 0.0000 0.0000        0.
                   49 0.0000 0.0000        0.
                   50 0.0000 0.0000        0.

                  SUM  7.03    5.15    11958.

            PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
   CFS     1114.      837.      490.      239.         11957.
INCHES                2.16      5.07      5.15           5.15
 AC-FT                415.      973.      989.           989.
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*OVF*
                                                       STATION      2

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.      200.      400.      600.      800.     1000.     1200.        0.        0.        0.        0.        0.        0.
                                                                                                       PRECIP(L) AND EXCESS(X)
       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
        1 .I        .         .         .         .         .         .         .         .         .         .         .      LLXX
        2 .   I     .         .         .         .         .         .         .         .         .         .         .     LLXXX
        3 .      I  .         .         .         .         .         .         .         .         .         .         .     LLXXX
        4 .         I         .         .         .         .         .         .         .         .         .         .   LLXXXXX
        5 .         .     I   .         .         .         .         .         .         .         .         .         .  LLXXXXXX
        6 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
        7 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
        8 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
        9 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
       10 .         .         .I        .         .         .         .         .         .         .         .         .   LLXXXXX
       11 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
       12 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
       13 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
       14 .         .         .    I    .         .         .         .         .         .         .         .         LLXXXXXXXXX
       15 .         .         .       I .         .         .         .         .         .         .         .         .  LLXXXXXX
       16 .         .         .         . I       .         .         .         .         .         .         .       LLXXXXXXXXXXX
       17 .         .         .         .      I  .         .         .         .         .         .         .        LLXXXXXXXXXX
       18 .         .         .         .         .         I         .         .         .         .        LLXXXXXXXXXXXXXXXXXXXX
       19 .         .         .         .         .         .     I   .         .         .         .         .         . LLXXXXXXX
       20 .         .         .         .         .   I     .         .         .         .         .         .         . LLXXXXXXX
       21 .         .         .         .  I      .         .         .         .         .         .         .         .  LLXXXXXX
       22 .         .         .     I   .         .         .         .         .         .         .         .         .   LLXXXXX
       23 .         .         . I       .         .         .         .         .         .         .         .         .   LLXXXXX
       24 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
       25 .         .    I    .         .         .         .         .         .         .         .         .         .         L
       26 .      I  .         .         .         .         .         .         .         .         .         .         .         L
       27 .  I      .         .         .         .         .         .         .         .         .         .         .         L
       28 .I        .         .         .         .         .         .         .         .         .         .         .         L
       29 I         .         .         .         .         .         .         .         .         .         .         .         L
       30 I         .         .         .         .         .         .         .         .         .         .         .         L
       31 I         .         .         .         .         .         .         .         .         .         .         .         L
       32 I         .         .         .         .         .         .         .         .         .         .         .         L
       33 I         .         .         .         .         .         .         .         .         .         .         .         L
       34 I         .         .         .         .         .         .         .         .         .         .         .         L
       35 I         .         .         .         .         .         .         .         .         .         .         .         L
       36 I         .         .         .         .         .         .         .         .         .         .         .         L
       37 I         .         .         .         .         .         .         .         .         .         .         .         L
       38 I         .         .         .         .         .         .         .         .         .         .         .         L
       39 I         .         .         .         .         .         .         .         .         .         .         .         L
       40 I         .         .         .         .         .         .         .         .         .         .         .         L
       41 I         .         .         .         .         .         .         .         .         .         .         .         L
       42 I         .         .         .         .         .         .         .         .         .         .         .         L
       43 I         .         .         .         .         .         .         .         .         .         .         .         L
       44 I         .         .         .         .         .         .         .         .         .         .         .         L
       45 I         .         .         .         .         .         .         .         .         .         .         .         L
       46 I         .         .         .         .         .         .         .         .         .         .         .         L
       47 I         .         .         .         .         .         .         .         .         .         .         .         L
       48 I         .         .         .         .         .         .         .         .         .         .         .         L
       49 I         .         .         .         .         .         .         .         .         .         .         .         L
       50 I         .         .         .         .         .         .         .         .         .         .         .         L
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```
*OVN*


              **********          **********          **********          **********          **********

                                                       HYDROGRAPH BALANCE

                         BALANCED HYDROGRAPH LOCAL INFLOW   AT  RTE 280  (AREA B)  POINT 2

                                             ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                                 2      88       0       0       0       0       1

                  BALANCE DESIRED      1     1093.     24     8471.      0       0.      0       0.      0       0.
               BALANCE RESULTS             1093.             8471.             0.              0.              0.

NUMBER OF ITERATIONS=  4

                                                    END-OF-PERIOD FLOWS AT      2
                                                           SUM=      8603.
                      9.        57.        95.       140.       218.       276.       230.       273.       285.       288.
                    275.       272.       285.       343.       391.       437.       516.       691.      1093.       611.
                    454.       358.       305.       278.       204.       102.        43.        17.         6.         2.
                      0.         0.         0.         0.         0.         0.         0.         0.         0.         0.
                      0.         0.         0.         0.         0.         0.         0.         0.         0.         0.

                                               PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                      CFS     1093.      634.      353.      172.          8603.
                                   INCHES                1.64      3.65      3.71           3.71
                                    AC-FT                 314.      700.      711.           711.
```

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*OVF*
                                              STATION     2

                         INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
    0.      100.      200.      300.      400.      500.      600.      700.      800.      900.     1000.     1100.        0.
    1 .I        .         .         .         .         .         .         .         .         .         .         .         .
    2 .     I   .         .         .         .         .         .         .         .         .         .         .         .
    3 .         I         .         .         .         .         .         .         .         .         .         .         .
    4 .         .   I     .         .         .         .         .         .         .         .         .         .         .
    5 .         .         . I       .         .         .         .         .         .         .         .         .         .
    6 .         .         .       I .         .         .         .         .         .         .         .         .         .
    7 .         .         .       I .         .         .         .         .         .         .         .         .         .
    8 .         .         .      I  .         .         .         .         .         .         .         .         .         .
    9 .         .         .        I.         .         .         .         .         .         .         .         .         .
   10 .         .         .        I.         .         .         .         .         .         .         .         .         .
   11 .         .         .      I  .         .         .         .         .         .         .         .         .         .
   12 .         .         .      I  .         .         .         .         .         .         .         .         .         .
   13 .         .         .        I.         .         .         .         .         .         .         .         .         .
   14 .         .         .         .   I     .         .         .         .         .         .         .         .         .
   15 .         .         .         .        I.         .         .         .         .         .         .         .         .
   16 .         .         .         .         .   I     .         .         .         .         .         .         .         .
   17 .         .         .         .         .         . I       .         .         .         .         .         .         .
   18 .         .         .         .         .         .         .        I.         .         .         .         .         .
   19 .         .         .         .         .         .         .         .         .         .         .        I.         .
   20 .         .         .         .         .         .         .I        .         .         .         .         .         .
   21 .         .         .         .         .    I    .         .         .         .         .         .         .         .
   22 .         .         .         .     I   .         .         .         .         .         .         .         .         .
   23 .         .         .         I         .         .         .         .         .         .         .         .         .
   24 .         .         .       I .         .         .         .         .         .         .         .         .         .
   25 .         .         I         .         .         .         .         .         .         .         .         .         .
   26 .         I         .         .         .         .         .         .         .         .         .         .         .
   27 .   I     .         .         .         .         .         .         .         .         .         .         .         .
   28 . I       .         .         .         .         .         .         .         .         .         .         .         .
   29 .I        .         .         .         .         .         .         .         .         .         .         .         .
   30 I         .         .         .         .         .         .         .         .         .         .         .         .
   31 I         .         .         .         .         .         .         .         .         .         .         .         .
   32 I         .         .         .         .         .         .         .         .         .         .         .         .
   33 I         .         .         .         .         .         .         .         .         .         .         .         .
   34 I         .         .         .         .         .         .         .         .         .         .         .         .
   35 I         .         .         .         .         .         .         .         .         .         .         .         .
   36 I         .         .         .         .         .         .         .         .         .         .         .         .
   37 I         .         .         .         .         .         .         .         .         .         .         .         .
   38 I         .         .         .         .         .         .         .         .         .         .         .         .
   39 I         .         .         .         .         .         .         .         .         .         .         .         .
   40 I         .         .         .         .         .         .         .         .         .         .         .         .
   41 I         .         .         .         .         .         .         .         .         .         .         .         .
   42 I         .         .         .         .         .         .         .         .         .         .         .         .
   43 I         .         .         .         .         .         .         .         .         .         .         .         .
   44 I         .         .         .         .         .         .         .         .         .         .         .         .
   45 I         .         .         .         .         .         .         .         .         .         .         .         .
   46 I         .         .         .         .         .         .         .         .         .         .         .         .
   47 I         .         .         .         .         .         .         .         .         .         .         .         .
   48 I         .         .         .         .         .         .         .         .         .         .         .         .
   49 I         .         .         .         .         .         .         .         .         .         .         .         .
   50 I         .         .         .         .         .         .         .         .         .         .         .         .
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*DVN*


          **********         **********         **********         **********         **********

                                             COMBINE HYDROGRAPHS

               COMBINE LOCAL INFLOW (AREA B) WITH FLOW ROUTED FROM  RESERVOIR   AT POINT 2

                                  ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                      2       2       0       0       0       0       1


                                         SUM OF 2 HYDROGRAPHS AT     2
      33.       92.      135.      185.      265.      325.      332.      327.      343.      350.
     340.      342.      359.      420.      473.      803.     1956.     3240.     5322.     5877.
    5274.     4283.     3746.     3257.     2803.     2379.     1914.     1437.     1047.      755.
     543.      440.      359.      281.      213.      158.      120.      101.       93.       90.
      89.       88.       87.       87.       87.       87.       87.       86.       86.       86.

                                      PEAK   6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                           CFS       5877.    4627.     1988.     1034.         51688.
                        INCHES                 2.06      3.54      3.83           3.83
                         AC-FT                2295.     3946.     4274.          4274.
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*OVF*
                                            STATION     2

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 .I        .         .         .         .         .         .         .         .         .         .         .         .
  3 .I        .         .         .         .         .         .         .         .         .         .         .         .
  4 . I       .         .         .         .         .         .         .         .         .         .         .         .
  5 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  6 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  7 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  8 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  9 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 10 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 11 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 12 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 13 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 14 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 15 .    I    .         .         .         .         .         .         .         .         .         .         .         .
 16 .       I .         .         .         .         .         .         .         .         .         .         .         .
 17 .         .         I         .         .         .         .         .         .         .         .         .         .
 18 .         .         .         . I       .         .         .         .         .         .         .         .         .
 19 .         .         .         .         .         .  I      .         .         .         .         .         .         .
 20 .         .         .         .         .         .        I.         .         .         .         .         .         .
 21 .         .         .         .         .         .  I      .         .         .         .         .         .         .
 22 .         .         .         .         .  I      .         .         .         .         .         .         .         .
 23 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 24 .         .         .         .  I      .         .         .         .         .         .         .         .         .
 25 .         .         .       I .         .         .         .         .         .         .         .         .         .
 26 .         .         .   I     .         .         .         .         .         .         .         .         .         .
 27 .         .        I.         .         .         .         .         .         .         .         .         .         .
 28 .         .   I     .         .         .         .         .         .         .         .         .         .         .
 29 .         I         .         .         .         .         .         .         .         .         .         .         .
 30 .       I .         .         .         .         .         .         .         .         .         .         .         .
 31 .    I    .         .         .         .         .         .         .         .         .         .         .         .
 32 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 33 .   I     .         .         .         .         .         .         .         .         .         .         .         .
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 35 . I       .         .         .         .         .         .         .         .         .         .         .         .
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 49 .I        .         .         .         .         .         .         .         .         .         .         .         .
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                                                                                      *NAO*
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                          RUNOFF SUMMARY, AVERAGE FLOW

                                  PEAK     6-HOUR    24-HOUR    72-HOUR       AREA
HYDROGRAPH AT           1        7563.      4755.      2781.      1387.      17.30
ROUTED TO               2        5410.      4114.      1721.       863.      17.30
ROUTED TO               2        5267.      4110.      1720.       862.      17.30
HYDROGRAPH AT           2        1093.       634.       353.       172.       3.60
ROUTED TO               2        1093.       634.       353.       172.       3.60
 2 COMBINED             2        5877.      4627.      1988.      1034.      20.90
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3-b

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******************************
HEC-1 VERSION DATED JAN 1973
UPDATED AUG 74
CHANGE NO. 01
******************************
            STEVENS CREEK  HYDROLOGY   100 YEAR  FLOOD HYDROGRAPHS  RESERVOIR  2000 AF       24 HR VOLUME  ADJUSTED

                                     RESERVOIR PEAK OUTFLOW BALANCED TO MATCH WEIGHTED AVERAGE
                                     BETWEEN REGIONAL VALUE AND STREAMGAGE STATISTICAL VALUE
                             JOB SPECIFICATION
                NQ    NHR   NMIN   IDAY    IHR   IMIN METRC   IPLT   IPRT NSTAN
                50      1      0      0      0      0      0      2      0      0
                                JOPER     NWT
                                    3       0



  **********         **********         **********         **********         **********

                         SUB-AREA RUNOFF COMPUTATION

     RUNOFF HYDROGRAPH  INFLOW TO RESERVOIR   (AREA A)      POINT 1

                ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                    1        0        0        0        0        0        1

                             HYDROGRAPH DATA
     IHYDG     TUHG    TAREA     SNAP    TRSDA    TRSPC    RATIO    ISNOW    ISAME    LOCAL
         0        0    17.30     0.00     0.00     0.00    0.000        0        0        0

                              PRECIP DATA
                          NP    STORM      DAJ      DAK
                          24    10.18     0.00     0.00
                             PRECIP PATTERN
  1.66       2.32       2.16       3.49       4.32       3.66       3.32       3.82       3.82       3.49
  3.49       3.82       3.98       5.82       4.16       6.32       6.15      10.96       4.65       4.47
  3.82       3.49       3.49       3.32

                               LOSS DATA
     STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
     0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.130    0.000    0.000

                           UNIT HYDROGRAPH DATA
                        TC=  2.30     R=  2.40     NTA=  6

                        UNIT GRAPH TIME-AREA ORDINATES
  0.15       0.15       6.79      13.55      15.00      17.30

                             RECESSION DATA
                   STRTQ=    1.00    QRCSN=    0.00    RTIOR= 1.00

     UNIT HYDROGRAPH 14 END-OF-PERIOD ORDINATES, LAG=  2.05 HOURS, CP= 0.52  VOL= 1.00
  820.      2234.      2602.      1875.      1228.       805.       527.       345.       226.       148.
   97.        64.        42.        27.

                             END-OF-PERIOD FLOW
                         TIME   RAIN   EXCS    COMP Q
                            1 0.1690 0.0390       32.
                            2 0.2362 0.1062      174.
                            3 0.2199 0.0899      413.
                   4 0.3553 0.2253       741.
                   5 0.4398 0.3098      1252.
                   6 0.3726 0.2626      1827.
                   7 0.3380 0.2080      2173.
                   8 0.3889 0.2589      2321.
                   9 0.3889 0.2589      2458.
                  10 0.3553 0.2253      2570.
                  11 0.3553 0.2253      2594.
                  12 0.3889 0.2589      2599.
                  13 0.4052 0.2752      2670.
                  14 0.5925 0.4625      2935.
                  15 0.4235 0.2935      3322.
                  16 0.6434 0.5134      3668.
                  17 0.6261 0.4961      4111.
                  18 1.1157 0.9857      4985.
                  19 0.4734 0.3434      5907.
                  20 0.4550 0.3250      5907.
                  21 0.3889 0.2589      5193.
                  22 0.3553 0.2253      4454.
                  23 0.3553 0.2253      3834.
                  24 0.3380 0.2080      3366.
                  25 0.0000 0.0000      2853.
                  26 0.0000 0.0000      2132.
                  27 0.0000 0.0000      1427.
                  28 0.0000 0.0000       926.
                  29 0.0000 0.0000       602.
                  30 0.0000 0.0000       385.
                  31 0.0000 0.0000       243.
                  32 0.0000 0.0000       142.
                  33 0.0000 0.0000        87.
                  34 0.0000 0.0000        51.
                  35 0.0000 0.0000        29.
                  36 0.0000 0.0000        15.
                  37 0.0000 0.0000         5.
                  38 0.0000 0.0000         0.
                  39 0.0000 0.0000         0.
                  40 0.0000 0.0000         0.
                  41 0.0000 0.0000         0.
                  42 0.0000 0.0000         0.
                  43 0.0000 0.0000         0.
                  44 0.0000 0.0000         0.
                  45 0.0000 0.0000         0.
                  46 0.0000 0.0000         0.
                  47 0.0000 0.0000         0.
                  48 0.0000 0.0000         0.
                  49 0.0000 0.0000         0.
                  50 0.0000 0.0000         0.

                 SUM  10.22   7.10     73412.

              PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
     CFS      5907.    5093.     3145.     1568.         73412.
  INCHES                2.74      6.76      7.03           7.03
   AC-FT               2527.     6242.     6484.          6484.
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*OVF*

                                                 STATION     1

                            INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
       0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
                                                                                                       PRECIP(L) AND EXCESS(X)
      0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
       1 I         .         .         .         .         .         .         .         .         .         .         .     LLLXX
       2 . I       .         .         .         .         .         .         .         .         .         .         .   LLLXXXX
       3 .   I     .         .         .         .         .         .         .         .         .         .         .    LLLXXX
       4 .      I  .         .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
       5 .         .  I      .         .         .         .         .         .         .         .         .        LLLXXXXXXXXX
       6 .         .       I .         .         .         .         .         .         .         .         .         .LLLXXXXXXX
       7 .         .         . I       .         .         .         .         .         .         .         .         . LLLXXXXXX
       8 .         .         .  I      .         .         .         .         .         .         .         .         LLLLXXXXXXX
       9 .         .         .    I    .         .         .         .         .         .         .         .         LLLLXXXXXXX
      10 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
      11 .         .         .     I   .         .         .         .         .         .         .         .         .LLLXXXXXXX
      12 .         .         .     I   .         .         .         .         .         .         .         .         LLLLXXXXXXX
      13 .         .         .      I  .         .         .         .         .         .         .         .         LLLXXXXXXXX
      14 .         .         .        I.         .         .         .         .         .         .         .    LLLXXXXXXXXXXXXX
      15 .         .         .         .  I      .         .         .         .         .         .         .        LLLLXXXXXXXX
      16 .         .         .         .      I  .         .         .         .         .         .         .   LLLXXXXXXXXXXXXXX
      17 .         .         .         .         . I       .         .         .         .         .         .   LLLLXXXXXXXXXXXXX
      18 .         .         .         .         .         I         .         .         .         . LLLXXXXXXXXXXXXXXXXXXXXXXXXXX
      19 .         .         .         .         .         .        I.         .         .         .         .       LLLXXXXXXXXXX
      20 .         .         .         .         .         .        I.         .         .         .         .        LLLXXXXXXXXX
      21 .         .         .         .         .         . I       .         .         .         .         .         LLLLXXXXXXX
      22 .         .         .         .         .    I    .         .         .         .         .         .         .LLLXXXXXXX
      23 .         .         .         .       I .         .         .         .         .         .         .         .LLLXXXXXXX
      24 .         .         .         .   I     .         .         .         .         .         .         .         . LLLXXXXXX
      25 .         .         .        I.         .         .         .         .         .         .         .         .         L
      26 .         .         . I       .         .         .         .         .         .         .         .         .         L
      27 .         .   I     .         .         .         .         .         .         .         .         .         .         L
      28 .        I.         .         .         .         .         .         .         .         .         .         .         L
      29 .     I   .         .         .         .         .         .         .         .         .         .         .         L
      30 .   I     .         .         .         .         .         .         .         .         .         .         .         L
      31 . I       .         .         .         .         .         .         .         .         .         .         .         L
      32 .I        .         .         .         .         .         .         .         .         .         .         .         L
      33 .I        .         .         .         .         .         .         .         .         .         .         .         L
      34 .I        .         .         .         .         .         .         .         .         .         .         .         L
      35 I         .         .         .         .         .         .         .         .         .         .         .         L
      36 I         .         .         .         .         .         .         .         .         .         .         .         L
      37 I         .         .         .         .         .         .         .         .         .         .         .         L
      38 I         .         .         .         .         .         .         .         .         .         .         .         L
      39 I         .         .         .         .         .         .         .         .         .         .         .         L
      40 I         .         .         .         .         .         .         .         .         .         .         .         L
      41 I         .         .         .         .         .         .         .         .         .         .         .         L
      42 I         .         .         .         .         .         .         .         .         .         .         .         L
      43 I         .         .         .         .         .         .         .         .         .         .         .         L
      44 I         .         .         .         .         .         .         .         .         .         .         .         L
      45 I         .         .         .         .         .         .         .         .         .         .         .         L
      46 I         .         .         .         .         .         .         .         .         .         .         .         L
      47 I         .         .         .         .         .         .         .         .         .         .         .         L
      48 I         .         .         .         .         .         .         .         .         .         .         .         L
      49 I         .         .         .         .         .         .         .         .         .         .         .         L
      50 I         .         .         .         .         .         .         .         .         .         .         .         L
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                                                        HYDROGRAPH BALANCE

                          BALANCED HYDROGRAPH INFLOW TO  RESERVOIR    AREA A

                                        ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                            1      88       0       0       0       0       1

                   BALANCE DESIRED       1     7563.     24    84012.      0         0.      0        0.      0        0.
                BALANCE RESULTS               7563.             84012.               0.               0.               0.

NUMBER OF ITERATIONS=  2

                                                   END-OF-PERIOD FLOWS AT      1
                                                          SUM=    87263.
                      29.       196.       466.       824.      1376.      2003.      2388.      2550.      2701.      2824.
                    2850.      2856.      2933.      3225.      3651.      4030.      4517.      5477.      7563.      6490.
                    5706.      4893.      4212.      3698.      3135.      2342.      1567.      1018.       670.       428.
                     271.       158.        97.        57.        32.        17.         6.         0.         0.         0.
                       0.         0.         0.         0.         0.         0.         0.         0.         0.         0.

                                              PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                                      CFS    7563.     5773.     3501.     1745.          87263.
                                   INCHES               3.11      7.53      7.82            7.82
                                    AC-FT              2865.     6947.     7216.           7216.
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*OVF*
                                            STATION      1

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 . I       .         .         .         .         .         .         .         .         .         .         .         .
  3 .    I    .         .         .         .         .         .         .         .         .         .         .         .
  4 .       I .         .         .         .         .         .         .         .         .         .         .         .
  5 .         .   I     .         .         .         .         .         .         .         .         .         .         .
  6 .         .         I         .         .         .         .         .         .         .         .         .         .
  7 .         .         .   I     .         .         .         .         .         .         .         .         .         .
  8 .         .         .     I   .         .         .         .         .         .         .         .         .         .
  9 .         .         .      I  .         .         .         .         .         .         .         .         .         .
 10 .         .         .       I .         .         .         .         .         .         .         .         .         .
 11 .         .         .       I .         .         .         .         .         .         .         .         .         .
 12 .         .         .        I.         .         .         .         .         .         .         .         .         .
 13 .         .         .        I.         .         .         .         .         .         .         .         .         .
 14 .         .         .         . I       .         .         .         .         .         .         .         .         .
 15 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 16 .         .         .         .         I         .         .         .         .         .         .         .         .
 17 .         .         .         .         .    I    .         .         .         .         .         .         .         .
 18 .         .         .         .         .         .    I    .         .         .         .         .         .         .
 19 .         .         .         .         .         .         .         .     I   .         .         .         .         .
 20 .         .         .         .         .         .         .    I    .         .         .         .         .         .
 21 .         .         .         .         .         .      I  .         .         .         .         .         .         .
 22 .         .         .         .         .        I.         .         .         .         .         .         .         .
 23 .         .         .         .         . I       .         .         .         .         .         .         .         .
 24 .         .         .         .      I  .         .         .         .         .         .         .         .         .
 25 .         .         .         .I        .         .         .         .         .         .         .         .         .
 26 .         .         .  I      .         .         .         .         .         .         .         .         .         .
 27 .         .     I   .         .         .         .         .         .         .         .         .         .         .
 28 .         I         .         .         .         .         .         .         .         .         .         .         .
 29 .      I  .         .         .         .         .         .         .         .         .         .         .         .
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 31 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 32 . I       .         .         .         .         .         .         .         .         .         .         .         .
 33 .I        .         .         .         .         .         .         .         .         .         .         .         .
 34 .I        .         .         .         .         .         .         .         .         .         .         .         .
 35 I         .         .         .         .         .         .         .         .         .         .         .         .
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 41 I         .         .         .         .         .         .         .         .         .         .         .         .
 42 I         .         .         .         .         .         .         .         .         .         .         .         .
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 47 I         .         .         .         .         .         .         .         .         .         .         .         .
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 49 I         .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*



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                                            HYDROGRAPH ROUTING

            ROUTE FLOW  THRU RESERVOIR   POINT 1

                                ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                    1        1        0        0        0        0        1
                                                      ROUTING DATA
                                         QLOSS    CLOSS      AVG     IRES    ISAME
                                           0.0    0.000     0.00        1        0

                                NSTPS    NSTDL      LAG    AMSKK        X      TSK    STORA
                                    0        0        0    0.000    0.000    0.000    2000.

    STORAGE=          0.     3804.     3899.     3995.     4092.     4191.     4292.     4394.     4498.     4604.
    OUTFLOW=          0.      100.      557.     1408.     2529.     3880.     5438.     7192.     9127.    11243.

                                         TIME  EOP STOR     AVG IN   EOP OUT
                                            1     1998.        29.       53.
                                            2     2003.       113.       53.
                                            3     2026.       331.       53.
                                            4     2075.       645.       55.
                                            5     2161.      1100.       57.
                                            6     2296.      1692.       60.
                                            7     2473.      2198.       65.
                                            8     2671.      2469.       70.
                                            9     2882.      2626.       76.
                                           10     3104.      2762.       82.
                                           11     3331.      2837.       89.
                                           12     3560.      2855.       94.
                                           13     3791.      2895.      100.
                                           14     3986.      3079.     1330.
                                           15     4104.      3478.     2694.
                                           16     4165.      3840.     3521.
                                           17     4204.      4274.     4078.
                                           18     4250.      4997.     4794.
                                           19     4335.      6520.     6135.
                                           20     4376.      7027.     6884.
                                           21     4338.      6098.     6231.
                                           22     4293.      5300.     5457.
                                           23     4249.      4553.     4752.
                                           24     4207.      3955.     4132.
                                           25     4170.      3417.     3597.
                                           26     4125.      2739.     2978.
                                           27     4070.      1955.     2270.
                                           28     4015.      1297.     1638.
                                           29     3963.       844.     1173.
                                           30     3931.       549.      839.
                                           31     3901.       350.      575.
                                           32     3877.       214.      449.
                                           33     3854.       127.      342.
                                           34     3836.        77.      254.
                                           35     3822.        44.      185.
                                           36     3811.        24.      131.
                                           37     3802.        11.      100.
                                           38     3794.         5.      100.
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                              39      3786.          0.      100.
                              40      3777.          0.       99.
                              41      3769.          0.       99.
                              42      3761.          0.       99.
                              43      3753.          0.       99.
                              44      3745.          0.       98.
                              45      3737.          0.       98.
                              46      3729.          0.       98.
                              47      3720.          0.       98.
                              48      3712.          0.       98.
                              49      3704.          0.       97.
                              50      3696.          0.       97.

                             SUM                            66774.

                          PEAK     6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
                CFS      6884.      5717.      2691.      1335.         66774.
             INCHES                  3.07       5.79       5.98           5.98
              AC-FT                 2836.      5341.      5521.          5521.
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*OVF*
                                                 STATION      1

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.     7000.     8000.        0.        0.        0.        0.
        1 IO        .         .         .         .         .         .         .         .         .         .         .         .
        2 .I        .         .         .         .         .         .         .         .         .         .         .         .
        3 .O I      .         .         .         .         .         .         .         .         .         .         .         .
        4 .O    I   .         .         .         .         .         .         .         .         .         .         .         .
        5 .O        .I        .         .         .         .         .         .         .         .         .         .         .
        6 .O        .      I  .         .         .         .         .         .         .         .         .         .         .
        7 .O        .         . I       .         .         .         .         .         .         .         .         .         .
        8 .O        .         .    I    .         .         .         .         .         .         .         .         .         .
        9 .O        .         .     I   .         .         .         .         .         .         .         .         .         .
       10 .O        .         .       I .         .         .         .         .         .         .         .         .         .
       11 .O        .         .       I .         .         .         .         .         .         .         .         .         .
       12 .O        .         .        I.         .         .         .         .         .         .         .         .         .
       13 .O        .         .        I.         .         .         .         .         .         .         .         .         .
       14 .         .  O      .         .I        .         .         .         .         .         .         .         .         .
       15 .         .         .      O  .   I     .         .         .         .         .         .         .         .         .
       16 .         .         .         .    O  I .         .         .         .         .         .         .         .         .
       17 .         .         .         .         .O I      .         .         .         .         .         .         .         .
       18 .         .         .         .         .       O I         .         .         .         .         .         .         .
       19 .         .         .         .         .         .         . O  I    .         .         .         .         .         .
       20 .         .         .         .         .         .         .        OI         .         .         .         .         .
       21 .         .         .         .         .         .         .IO       .         .         .         .         .         .
       22 .         .         .         .         .         .  I O    .         .         .         .         .         .         .
       23 .         .         .         .         .     I O .         .         .         .         .         .         .         .
       24 .         .         .         .         IO        .         .         .         .         .         .         .         .
       25 .         .         .         .   I O   .         .         .         .         .         .         .         .         .
       26 .         .         .      I  O         .         .         .         .         .         .         .         .         .
       27 .         .         I  O      .         .         .         .         .         .         .         .         .         .
       28 .         .  I  O   .         .         .         .         .         .         .         .         .         .         .
       29 .       I . O       .         .         .         .         .         .         .         .         .         .         .
       30 .    I  O .         .         .         .         .         .         .         .         .         .         .         .
       31 .  I  O   .         .         .         .         .         .         .         .         .         .         .         .
       32 . I O     .         .         .         .         .         .         .         .         .         .         .         .
       33 .I O      .         .         .         .         .         .         .         .         .         .         .         .
       34 .I O      .         .         .         .         .         .         .         .         .         .         .         .
       35 I O       .         .         .         .         .         .         .         .         .         .         .         .
       36 IO        .         .         .         .         .         .         .         .         .         .         .         .
       37 IO        .         .         .         .         .         .         .         .         .         .         .         .
       38 IO        .         .         .         .         .         .         .         .         .         .         .         .
       39 IO        .         .         .         .         .         .         .         .         .         .         .         .
       40 IO        .         .         .         .         .         .         .         .         .         .         .         .
       41 IO        .         .         .         .         .         .         .         .         .         .         .         .
       42 IO        .         .         .         .         .         .         .         .         .         .         .         .
       43 IO        .         .         .         .         .         .         .         .         .         .         .         .
       44 IO        .         .         .         .         .         .         .         .         .         .         .         .
       45 IO        .         .         .         .         .         .         .         .         .         .         .         .
       46 IO        .         .         .         .         .         .         .         .         .         .         .         .
       47 IO        .         .         .         .         .         .         .         .         .         .         .         .
       48 IO        .         .         .         .         .         .         .         .         .         .         .         .
       49 IO        .         .         .         .         .         .         .         .         .         .         .         .
       50 IO        .         .         .         .         .         .         .         .         .         .         .         .
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*DVN*



          **********          **********          **********          **********          **********

                                             HYDROGRAPH BALANCE

                 BALANCED HYDROGRAPH PEAK TO FIT WEIGHTED GAGE STATISTICS  5762 CFS (ADJUSTED)

                                      ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                          2      88       0       0       0       0       1

           BALANCE DESIRED       I     5596.      0        0.      0        0.      0        0.      0        0.
        BALANCE RESULTS              5596.               0.               0.               0.               0.

NUMBER OF ITERATIONS=  1

                                            END-OF-PERIOD FLOWS AT       2
                                                   SUM=    54275.
               39.        43.        42.        44.        46.        49.        53.        57.        62.        66.
               71.        76.        81.      1091.      2190.      2362.      3315.      3897.      5027.      5596.
             5065.      4436.      3863.      3359.      2924.      2421.      1845.      1332.       953.       682.
              469.       365.       278.       207.       150.       107.        81.        81.        81.        81.
               81.        80.        80.        80.        80.        80.        80.        79.        79.        79.

                                         PEAK     6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
                                 CFS     5596.      4647.      2183.      1085.         54275.
                              INCHES                 2.50       4.71       4.86           4.86
                               AC-FT                2306.      4341.      4489.          4488.
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*OVF*
                                                         STATION     2

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 I         .         .         .         .         .         .         .         .         .         .         .         .
  3 I         .         .         .         .         .         .         .         .         .         .         .         .
  4 I         .         .         .         .         .         .         .         .         .         .         .         .
  5 I         .         .         .         .         .         .         .         .         .         .         .         .
  6 I         .         .         .         .         .         .         .         .         .         .         .         .
  7 .I        .         .         .         .         .         .         .         .         .         .         .         .
  8 .I        .         .         .         .         .         .         .         .         .         .         .         .
  9 .I        .         .         .         .         .         .         .         .         .         .         .         .
 10 .I        .         .         .         .         .         .         .         .         .         .         .         .
 11 .I        .         .         .         .         .         .         .         .         .         .         .         .
 12 .I        .         .         .         .         .         .         .         .         .         .         .         .
 13 .I        .         .         .         .         .         .         .         .         .         .         .         .
 14 .         .I        .         .         .         .         .         .         .         .         .         .         .
 15 .         .         . I       .         .         .         .         .         .         .         .         .         .
 16 .         .         .        I.         .         .         .         .         .         .         .         .         .
 17 .         .         .         .  I      .         .         .         .         .         .         .         .         .
 18 .         .         .         .        I.         .         .         .         .         .         .         .         .
 19 .         .         .         .         .         I         .         .         .         .         .         .         .
 20 .         .         .         .         .         .     I   .         .         .         .         .         .         .
 21 .         .         .         .         .         .I        .         .         .         .         .         .         .
 22 .         .         .         .         .   I     .         .         .         .         .         .         .         .
 23 .         .         .         .        I.         .         .         .         .         .         .         .         .
 24 .         .         .         .   I     .         .         .         .         .         .         .         .         .
 25 .         .         .        I.         .         .         .         .         .         .         .         .         .
 26 .         .         .   I     .         .         .         .         .         .         .         .         .         .
 27 .         .       I .         .         .         .         .         .         .         .         .         .         .
 28 .         .  I      .         .         .         .         .         .         .         .         .         .         .
 29 .         I         .         .         .         .         .         .         .         .         .         .         .
 30 .      I  .         .         .         .         .         .         .         .         .         .         .         .
 31 .    I    .         .         .         .         .         .         .         .         .         .         .         .
 32 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 33 .  I      .         .         .         .         .         .         .         .         .         .         .         .
 34 . I       .         .         .         .         .         .         .         .         .         .         .         .
 35 . I       .         .         .         .         .         .         .         .         .         .         .         .
 36 .I        .         .         .         .         .         .         .         .         .         .         .         .
 37 .I        .         .         .         .         .         .         .         .         .         .         .         .
 38 .I        .         .         .         .         .         .         .         .         .         .         .         .
 39 .I        .         .         .         .         .         .         .         .         .         .         .         .
 40 .I        .         .         .         .         .         .         .         .         .         .         .         .
 41 .I        .         .         .         .         .         .         .         .         .         .         .         .
 42 .I        .         .         .         .         .         .         .         .         .         .         .         .
 43 .I        .         .         .         .         .         .         .         .         .         .         .         .
 44 .I        .         .         .         .         .         .         .         .         .         .         .         .
 45 .I        .         .         .         .         .         .         .         .         .         .         .         .
 46 .I        .         .         .         .         .         .         .         .         .         .         .         .
 47 .I        .         .         .         .         .         .         .         .         .         .         .         .
 48 .I        .         .         .         .         .         .         .         .         .         .         .         .
 49 .I        .         .         .         .         .         .         .         .         .         .         .         .
 50 .I        .         .         .         .         .         .         .         .         .         .         .         .
 *OVH*


                 **********          **********          **********          **********          **********

                                                   HYDROGRAPH ROUTING

                 ROUTE   STEVENS CREEK RESERVOIR OUTFLOW   DOWN TO  RTE 280     POINT 2

                                    ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                        2       1       0       0       0       0       1
                                                     ROUTING DATA
                                            QLOSS   CLOSS     AVG    IRES   ISAME
                                              0.0   0.000    0.00       1       0

                                    NSTPS   NSTDL     LAG   AMSKK       X     TSK   STORA
                                        0       0       0   0.000   0.000   0.000      0.

      STORAGE=          0.       50.      100.      150.      250.      380.        0.        0.        0.        0.
      OUTFLOW=          0.      500.     1500.     2500.     6500.    13000.        0.        0.        0.        0.

                                            TIME  EOP STOR    AVG IN   EOP OUT
                                               1        2.       38.       22.
                                               2        3.       41.       33.
                                               3        4.       43.       39.
                                               4        4.       44.       42.
                                               5        4.       45.       44.
                                               6        5.       48.       46.
                                               7        5.       51.       49.
                                               8        5.       55.       52.
                                               9        6.       59.       56.
                                              10        6.       64.       61.
                                              11        7.       69.       65.
                                              12        7.       74.       70.
                                              13        8.       79.       75.
                                              14       37.      581.      371.
                                              15       97.     1635.     1445.
                                              16      146.     2526.     2423.
                                              17      168.     3088.     3223.
                                              18      180.     3606.     3700.
                                              19      204.     4462.     4650.
                                              20      224.     5312.     5475.
                                              21      220.     5331.     5295.
                                              22      203.     4751.     4617.
                                              23      188.     4149.     4034.
                                              24      175.     3611.     3506.
                                              25      164.     3141.     3052.
                                              26      152.     2673.     2579.
                                              27      133.     2133.     2154.
                                              28      107.     1589.     1642.
                                              29       85.     1143.     1190.
                                              30       68.      913.      853.
                                              31       55.      575.      601.
                                              32       46.      417.      458.
                                              33       38.      322.      378.
                                              34       30.      242.      299.
                                              35       23.      178.      229.
                                              36       17.      128.      170.
                                              37       13.       94.      126.
                                              38       10.       81.      100.
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                    39        9.       81.       89.
                    40        8.       81.       84.
                    41        8.       81.       82.
                    42        8.       80.       81.
                    43        8.       80.       81.
                    44        8.       80.       80.
                    45        8.       80.       80.
                    46        8.       80.       80.
                    47        8.       80.       80.
                    48        8.       79.       80.
                    49        8.       79.       79.
                    50        8.       79.       79.

                   SUM                         54198.

                 PEAK    6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
          CFS   5479.     4628.      2186.      1084.         54198.
       INCHES              2.49       4.70       4.86           4.86
        AC-FT             2296.      4338.      4482.          4482.
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*OVF*
                                                  STATION     2

                             INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
        0.     1000.     2000.     3000.     4000.     5000.     6000.        0.        0.        0.        0.        0.        0.
        1 I         .         .         .         .         .         .         .         .         .         .         .         .
        2 I         .         .         .         .         .         .         .         .         .         .         .         .
        3 I         .         .         .         .         .         .         .         .         .         .         .         .
        4 I         .         .         .         .         .         .         .         .         .         .         .         .
        5 I         .         .         .         .         .         .         .         .         .         .         .         .
        6 I         .         .         .         .         .         .         .         .         .         .         .         .
        7 OI        .         .         .         .         .         .         .         .         .         .         .         .
        8 .I        .         .         .         .         .         .         .         .         .         .         .         .
        9 .I        .         .         .         .         .         .         .         .         .         .         .         .
       10 .I        .         .         .         .         .         .         .         .         .         .         .         .
       11 .I        .         .         .         .         .         .         .         .         .         .         .         .
       12 .I        .         .         .         .         .         .         .         .         .         .         .         .
       13 .I        .         .         .         .         .         .         .         .         .         .         .         .
       14 .   O I   .         .         .         .         .         .         .         .         .         .         .         .
       15 .         .   O I   .         .         .         .         .         .         .         .         .         .         .
       16 .         .         .   OI    .         .         .         .         .         .         .         .         .         .
       17 .         .         .         .IO       .         .         .         .         .         .         .         .         .
       18 .         .         .         .     IO  .         .         .         .         .         .         .         .         .
       19 .         .         .         .         .    IO   .         .         .         .         .         .         .         .
       20 .         .         .         .         .         .  I O    .         .         .         .         .         .         .
       21 .         .         .         .         .         .  I      .         .         .         .         .         .         .
       22 .         .         .         .         .     O I .         .         .         .         .         .         .         .
       23 .         .         .         .         OI        .         .         .         .         .         .         .         .
       24 .         .         .         .    OI   .         .         .         .         .         .         .         .         .
       25 .         .         .         .I        .         .         .         .         .         .         .         .         .
       26 .         .         .     OI  .         .         .         .         .         .         .         .         .         .
       27 .         .         .IO       .         .         .         .         .         .         .         .         .         .
       28 .         .     I   .         .         .         .         .         .         .         .         .         .         .
       29 .         .IO       .         .         .         .         .         .         .         .         .         .         .
       30 .       IO.         .         .         .         .         .         .         .         .         .         .         .
       31 .     I   .         .         .         .         .         .         .         .         .         .         .         .
       32 .   IO    .         .         .         .         .         .         .         .         .         .         .         .
       33 .  IO     .         .         .         .         .         .         .         .         .         .         .         .
       34 . IO      .         .         .         .         .         .         .         .         .         .         .         .
       35 . I       .         .         .         .         .         .         .         .         .         .         .         .
       36 .IO       .         .         .         .         .         .         .         .         .         .         .         .
       37 .I        .         .         .         .         .         .         .         .         .         .         .         .
       38 .I        .         .         .         .         .         .         .         .         .         .         .         .
       39 .I        .         .         .         .         .         .         .         .         .         .         .         .
       40 .I        .         .         .         .         .         .         .         .         .         .         .         .
       41 .I        .         .         .         .         .         .         .         .         .         .         .         .
       42 .I        .         .         .         .         .         .         .         .         .         .         .         .
       43 .I        .         .         .         .         .         .         .         .         .         .         .         .
       44 .I        .         .         .         .         .         .         .         .         .         .         .         .
       45 .I        .         .         .         .         .         .         .         .         .         .         .         .
       46 .I        .         .         .         .         .         .         .         .         .         .         .         .
       47 .I        .         .         .         .         .         .         .         .         .         .         .         .
       48 .I        .         .         .         .         .         .         .         .         .         .         .         .
       49 .I        .         .         .         .         .         .         .         .         .         .         .         .
       50 .I        .         .         .         .         .         .         .         .         .         .         .         .
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*OVN*

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                                         SUB-AREA RUNOFF COMPUTATION

      RUNOFF HYDROGRAPH LOCAL INFLOW  AT RTE 290  (AREA B)   POINT 2

                              ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                  2        0        0        0        0        0        1

                                              HYDROGRAPH DATA
            IHYDG     IUHG    TAREA      SNAP    TRSDA    TRSPC    RATIO    ISNOW    ISAME   LOCAL
                0        0     3.60      0.00     0.00     0.00    0.000        0        0       0

                                                PRECIP DATA
                                        NP    STORM      DAJ      DAK
                                        24     7.01     0.00     0.00
                                               PRECIP PATTERN
    1.61       2.42       2.10       3.39       4.19       3.71       3.23       3.71       3.87       3.39
    3.39       3.71       3.87       5.64       4.19       6.61       6.29      11.77       4.67       4.36
    3.71       3.39       3.55       3.23

                                                 LOSS DATA
       STRKR    DLTKR    RTIOL    ERAIN    STRKS    RTIOK    STRTL    CNSTL    ALSMX    RTIMP
       0.000    0.000    1.000    0.000    0.000    1.000    0.000    0.090    0.000    0.150

                                           UNIT HYDROGRAPH DATA
                                    TC=  1.50     R=  1.20     NTA=  0

                                              RECESSION DATA
                               STRTQ=    0.00     QRCSN=    0.00     RTIOR= 1.00

      UNIT HYDROGRAPH  7 END-OF-PERIOD ORDINATES, LAG=   1.38 HOURS, CP= 0.60  VOL= 1.00
    497.       888.       551.       227.        93.        38.        16.

                                           END-OF-PERIOD FLOW
                                      TIME   RAIN   EXCS     COMP Q
                                        1 0.1129 0.0364        18.
                                        2 0.1696 0.0931        79.
                                        3 0.1472 0.0707       138.
                                        4 0.2376 0.1611       202.
                                        5 0.2937 0.2172       315.
                                        6 0.2601 0.1836       399.
                                        7 0.2264 0.1499       405.
                                        8 0.2601 0.1836       394.
                                        9 0.2713 0.1948       412.
                                       10 0.2376 0.1611       416.
                                       11 0.2376 0.1611       397.
                                       12 0.2601 0.1836       393.
                                       13 0.2713 0.1948       413.
                                       14 0.3954 0.3189       495.
                                       15 0.2937 0.2172       564.
                                       16 0.4634 0.3869       631.
                                       17 0.4409 0.3644       745.
                                       18 0.8251 0.7486       998.
                                       19 0.3274 0.2509      1114.
                                       20 0.3056 0.2291       882.
                                       21 0.2601 0.1836       655.
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                        22 0.2776 0.1611       516.
                        23 0.2489 0.1724       440.
                        24 0.2264 0.1499       401.
                        25 0.0000 0.0000       295.
                        26 0.0000 0.0000       148.
                        27 0.0000 0.0000        59.
                        28 0.0000 0.0000        23.
                        29 0.0000 0.0000         9.
                        30 0.0000 0.0000         2.
                        31 0.0000 0.0000         0.
                        32 0.0000 0.0000         0.
                        33 0.0000 0.0000         0.
                        34 0.0000 0.0000         0.
                        35 0.0000 0.0000         0.
                        36 0.0000 0.0000         0.
                        37 0.0000 0.0000         0.
                        38 0.0000 0.0000         0.
                        39 0.0000 0.0000         0.
                        40 0.0000 0.0000         0.
                        41 0.0000 0.0000         0.
                        42 0.0000 0.0000         0.
                        43 0.0000 0.0000         0.
                        44 0.0000 0.0000         0.
                        45 0.0000 0.0000         0.
                        46 0.0000 0.0000         0.
                        47 0.0000 0.0000         0.
                        48 0.0000 0.0000         0.
                        49 0.0000 0.0000         0.
                        50 0.0000 0.0000         0.

                       SUM   7.03    5.15     11958.

               PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
        CFS    1114.     837.      490.      239.         11957.
     INCHES              2.16      5.07      5.15           5.15
      AC-FT              415.      973.      989.           989.
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 *OVF*

                                               STATION      2

                           INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
      0.      200.      400.      600.      800.    1000.     1200.         0.        0.        0.        0.        0.        0.
                                                                                                     PRECIP(L) AND EXCESS(X)
     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       1.2       0.8       0.4       0.0
      1 .I        .         .         .         .         .         .         .         .         .         .         .      LLXX
      2 .   I     .         .         .         .         .         .         .         .         .         .         .     LLXXX
      3 .      I  .         .         .         .         .         .         .         .         .         .         .     LLXXX
      4 .         I         .         .         .         .         .         .         .         .         .         .   LLXXXXX
      5 .         .     I   .         .         .         .         .         .         .         .         .         .  LLXXXXXX
      6 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
      7 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
      8 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
      9 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
     10 .         .         .I        .         .         .         .         .         .         .         .         .   LLXXXXX
     11 .         .         I         .         .         .         .         .         .         .         .         .   LLXXXXX
     12 .         .         I         .         .         .         .         .         .         .         .         .  LLXXXXXX
     13 .         .         .I        .         .         .         .         .         .         .         .         .  LLXXXXXX
     14 .         .         .    I    .         .         .         .         .         .         .         LLXXXXXXXXX
     15 .         .         .       I .         .         .         .         .         .         .         .  LLXXXXXX
     16 .         .         .         . I       .         .         .         .         .         .       LLXXXXXXXXXXX
     17 .         .         .         .      I  .         .         .         .         .         .        LLXXXXXXXXXX
     18 .         .         .         .         .         I         .         .         .        LLXXXXXXXXXXXXXXXXXXXX
     19 .         .         .         .         .         .     I   .         .         .         .         . LLXXXXXXX
     20 .         .         .         .         .   I     .         .         .         .         .         . LLXXXXXXX
     21 .         .         .         .  I      .         .         .         .         .         .         .  LLXXXXXX
     22 .         .         .     I   .         .         .         .         .         .         .         .   LLXXXXX
     23 .         .         . I       .         .         .         .         .         .         .         .   LLXXXXX
     24 .         .         I         .         .         .         .         .         .         .         .   LLXXXXX
     25 .         .    I    .         .         .         .         .         .         .         .         .         L
     26 .      I  .         .         .         .         .         .         .         .         .         .         L
     27 .  I      .         .         .         .         .         .         .         .         .         .         L
     28 .I        .         .         .         .         .         .         .         .         .         .         L
     29 I         .         .         .         .         .         .         .         .         .         .         L
     30 I         .         .         .         .         .         .         .         .         .         .         L
     31 I         .         .         .         .         .         .         .         .         .         .         L
     32 I         .         .         .         .         .         .         .         .         .         .         L
     33 I         .         .         .         .         .         .         .         .         .         .         L
     34 I         .         .         .         .         .         .         .         .         .         .         L
     35 I         .         .         .         .         .         .         .         .         .         .         L
     36 I         .         .         .         .         .         .         .         .         .         .         L
     37 I         .         .         .         .         .         .         .         .         .         .         L
     38 I         .         .         .         .         .         .         .         .         .         .         L
     39 I         .         .         .         .         .         .         .         .         .         .         L
     40 I         .         .         .         .         .         .         .         .         .         .         L
     41 I         .         .         .         .         .         .         .         .         .         .         .
     42 I         .         .         .         .         .         .         .         .         .         .         .
     43 I         .         .         .         .         .         .         .         .         .         .         .
     44 I         .         .         .         .         .         .         .         .         .         .         .
     45 I         .         .         .         .         .         .         .         .         .         .
     46 I         .         .         .         .         .         .         .         .         .         .         .
     47 I         .         .         .         .         .         .         .         .         .         .         .
     48 I         .         .         .         .         .         .         .         .         .         .         .
     49 I         .         .         .         .         .         .         .         .         .         .         .
     50 I         .         .         .         .         .         .         .         .         .         .
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*OVN-

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                                                  HYDROGRAPH BALANCE

                    BALANCED HYDROGRAPH LOCAL INFLOW   AT  RTE 280  (AREA B)  POINT 2

                                          ISTAQ    ICOMP    IECON    ITAPE     JPLT     JPRT    INAME
                                              2       86        0        0        0        0        1

                 BALANCE DESIRED      1     1093.     24    10987.       0        0.       0        0.       0        0.
               BALANCE RESULTS            1093.           10987.              0.               0.               0.

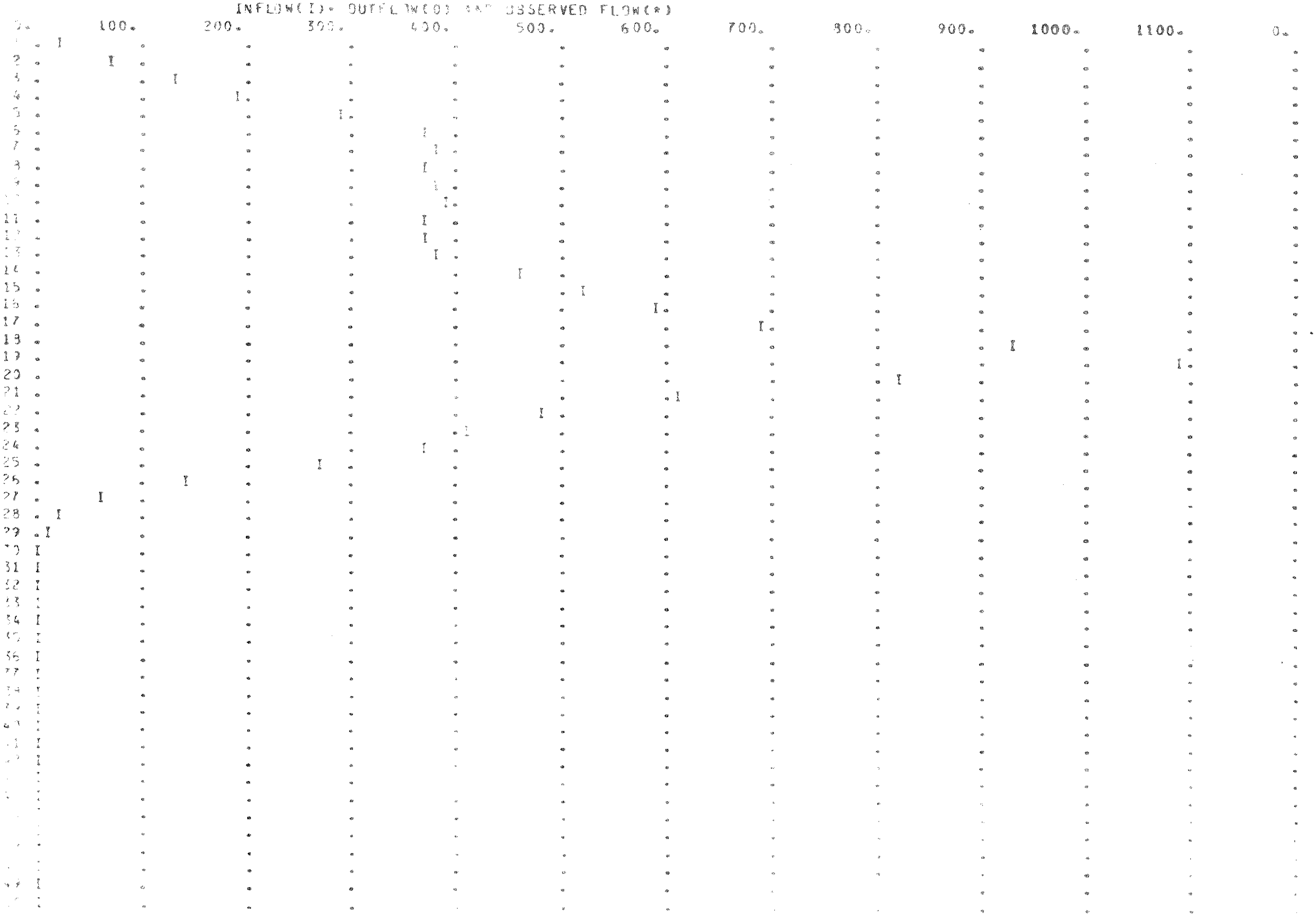
NUMBER OF ITERATIONS=  1

                                                       END-OF-PERIOD FLOWS AT      2
                                                              SUM=    11163.
                   15.        73.        12 .       188.       292.       371.       376.       366.       382.       387.
                  368.       365.       384.       459.       524.       586.       691.       927.      1093.       819.
                  609.       480.       409.       372.       274.       137.        55.        22.         8.         2.
                    0.         0.         0.         0.         0.         0.         0.         0.         0.         0.
                    0.         0.         0.         0.         0.         0.         0.         0.         0.         0.

                                                 PEAK     6-HOUR    24-HOUR    72-HOUR   TOTAL VOLUME
                                     CFS        1093.       788.       458.       223.         11163.
                                  INCHES                    2.03       4.73       4.81           4.81
                                   AC-FT                    391.       908.       923.           923.
```

OVF

STATION 2



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*DVN


     **********          **********          **********          **********          **********

                                        COMBINE HYDROGRAPHS

        COMBINE LOCAL INFLOW (AREA B) WITH FLOW ROUTED FROM  RESERVOIR   AT POINT 2

                              ISTAQ   ICOMP   IECON   ITAPE    JPLT    JPRT   INAME
                                  2       2       0       0       0       0       1


                                       SUM OF 2 HYDROGRAPHS AT      2
     38.       106.       167.       230.       336.       417.       425.       419.       439.       448.
    434.       435.       459.       930.      1969.      3009.      3915.      4627.      5743.      6293.
   5904.      5096.      4443.      3879.      3325.      2716.      2209.      1664.      1198.       855.
    601.       458.       378.       299.       223.       170.       126.       100.        89.        84.
     82.        81.        81.        80.        80.        80.        80.        80.        79.        79.

                                  PEAK    6-HOUR   24-HOUR   72-HOUR   TOTAL VOLUME
                          CFS    6293.     5351.     2540.     1307.         65361.
                       INCHES               2.38      4.52      4.85           4.85
                        AC-FT              2655.     5040.     5405.          5405.
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*OVF*

                                            STATION      2

                       INFLOW(I), OUTFLOW(O) AND OBSERVED FLOW(*)
  0.      1000.     2000.     3000.     4000.     5000.     6000.     7000.        0.        0.        0.        0.        0.
  1 I         .         .         .         .         .         .         .         .         .         .         .         .
  2 .I        .         .         .         .         .         .         .         .         .         .         .         .
  3 . I       .         .         .         .         .         .         .         .         .         .         .         .
  4 . I       .         .         .         .         .         .         .         .         .         .         .         .
  5 .  I      .         .         .         .         .         .         .         .         .         .         .         .
  6 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  7 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  8 .   I     .         .         .         .         .         .         .         .         .         .         .         .
  9 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 10 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 11 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 12 .   I     .         .         .         .         .         .         .         .         .         .         .         .
 13 .    I    .         .         .         .         .         .         .         .         .         .         .         .
 14 .       I .         .         .         .         .         .         .         .         .         .         .         .
 15 .         .         I         .         .         .         .         .         .         .         .         .         .
 16 .         .         .         I         .         .         .         .         .         .         .         .         .
 17 .         .         .         .        I.         .         .         .         .         .         .         .         .
 18 .         .         .         .         .     I   .         .         .         .         .         .         .         .
 19 .         .         .         .         .         .      I  .         .         .         .         .         .         .
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                        RUNOFF SUMMARY, AVERAGE FLOW

                                PEAK    6-HOUR   24-HOUR   72-HOUR      AREA
HYDROGRAPH AT          1       7563.     5775.     3501.     1745.     17.30
ROUTED TO              2       5596.     4647.     2188.     1085.     17.30
ROUTED TO              2       5475.     4623.     2186.     1084.     17.30
HYDROGRAPH AT          2       1093.      788.      458.      223.      3.60
ROUTED TO              2       1093.      788.      458.      223.      3.60
 2 COMBINED            2       6293.     5351.     2540.     1307.     20.90
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